STUDENT DATA BANK

for

MASHAL DEGREE COLLEGE FOR WOMEN.WAH CANTT

Prepared by
Muhammad Shakeel & Safeer Akhter
Class: PGD (FGEI-2)

Computer Center
Quaid-i-Azam University Islamabad

IN THE NAME OF ALLAH,

THE MOST BENIFICENT AND

THE MERCIFUL

- **STUDENT DATA BANK**

A Dissertation Submitted to Quaid-e-Azam University

for

The award of
Post Graduate Diploma
In Computer Science.

- **STUDENT DATA BANK**

FINAL APPROVAL

IT IS CERTIFIED THAT WE HAVE READ THE DISSERTATION CAREFULLY SUBMITTED BY

MUHAMMAD SHAKEEL

AND

SAFEER AKHTER

WE HAVE FOUND IT UPTO THE STANDARD TO WARRAD ITS ACCEPTANCE BY QUAID-E-AZAM UNIVERSITY, ISLAMABAD FOR THE AWARD OF

POST GRADUATE DIPLOMA IN COMPUTER SCIENCE.

EXECUTIVE COMMITTEE

1. EXTERNAL EXAMINER: _____

2. SUPERVISOR:
(MR.NAZIM-UD-DIN): _____

3. DIRECTOR.
(MR. NAZIM-UD-DIN) _____

QUAID-E-AZAM UNIVERSITY
ISLAMABAD

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Dedicated to
Our respectable
Parents
and
Teachers

DECLARATION

We hereby declare that this software, neither as a whole nor as a part thereof has been copied by out any source. It is further declared that We developed this software and this report entirely on the basis of 0ur personal efforts made the sincere guidance of my project supervisor.

If any part of this software to be copied of found to be a report of some other We shall standby the consequences.

No portion of work presented in this report has been submitted in support of any application for any other degree of qualification of this or any other University or institute of learning.

We further declare that this software and all associated documents, reports and records are submitted as partial requirement for the diploma of PGD

ACKNOWLEDGEMENT

First of all we are very grateful to Almighty ALLAH, who help us to complete this project successfully.

We are highly obliged to our beloved supervisor Mr. NAZIM-UD-DIN, who has provided his invaluable time and take keen interest throughout project and supported morally during our entire academic carrier in campus.

We are also thankful to our family members who always gave us courage and share our problems.

We are also very thankful to our friends KHALID MEHMOOD and SHAKEEL AHMAD that gave us their guidelines and helped us.

PROJECT PREVIEW

PROJECT TITLE:
STUDENT DATA BANK

PROJECT STATEMENT:
To computerize the Existing Admission System of WSSO

UNDERTAKEN BY:
Muhammad Shakeel **and** Safeer Akhter

SUPERVISED BY:
MR.NAZIM-UD-DIN
DIRECTOR,
Computer Science Department
Quaid-i-Azam University Islamabad

PHASES OF WORK:
1. System study.
2. Analysis.
3. Design.
4. Development.
5. Testing.

SOFTWARE DEVELOPMENT ENVIRONMENT:

Computer:	Pentium-III 500 MHz.
Operating System:	Windows 98 SE
Tool:	Turbo C++

CHAPTER NO. 1

INTRODUCTION

WHY WE SELECTED C++ AS A SOURCELANGUAGE

1. Main objective of selection of C++ is to learn this language in detail.
2. C++ language provides too flexibility and variety .
3. C++ provides automatic storage allocation .
4. C++ needs small area in memory as compare to any other data base language.
5. C++ is decorated with a lot of bombastic Jorgen.
6. Any object function called member function provides the only way to access its data.

This project is about Computerization of Women Social Services Organization (WSSO) Wah Cantt.
We designed and developed it such manner, which is understandable and Acceptable easily, and work accurately. We designed it in a project. We use simple English language and simple instructions, which are understandable by user.

This system requires much less labor and there are very less chances of error.

BY THE GRACE OF ALMIGHTY "ALLAH" We SUCCEEDED IN DEVELOPING
SYSTEM SOFTWARE, WHICH FULFILLS SUCCESFULY REQUIRMENT OF SYSTEM OR COMPUTERIZED SYSTEM.

OBJECT ORIENTED PROGRAMMING (OOP)

We live in a world of objects. These objects exist in nature, in human made entities, in commerce and trade, and in the products we use. These can be categorized, described, organized, combined, manipulated and created. For instance doors, windows, paints, colors, glass, walls, roofs, ceilings, frames, hinges, door knobs, etc, all are objects which may be created and manipulated to design and create yet another object ' a house'.
Therefore it is no surprise that an object oriented view would be proposed for the creation of the computer software. It is an abstraction, which enables us to world in ways that help us to understand and navigate it.

Object oriented approach (OOP) was first introduced in the late sixties. And now the approach has evolved into a full-fledged engineering discipline, known as object oriented software engineering.

OBJECT ORIENTED PARADIGM

The object-oriented approach demands an evolutionary approach towards engineering. Following are the steps, which are followed in a spiral path, starting from the beginning of software to the end.

. Identify candidate classes
. Look up classes in library
. Extract classes if available
. Engineer classes if unavailable
. Object oriented
. Object oriented design
. Programming
. Testing
. Put new classes in the library
. Construct nth iteration of the system

CLASSES AND OBJECTS

In object oriented concept, a class is a logical construct, which encapsulates the data and the procedural abstractions required to describe the contents and behavior of some real world entity. A wall of procedures (functions) separates data and the procedural abstractions (operations, methods or services). Which means data (i.e. the attributes) can only be approached through the functions or the procedural abstractions. Which achieves the concept of information hiding, i.e. the attributes of a class is hidden from rest of the software.
By defining all objects that exist within a class inherit it's attributes and the operations that are available to manipulate they attributes. A super-class is a collection of classes, and a subclass is a specialized instance of a class.

ATTRIBUTES AND DOMAIN

Attributes are attached to classes and objects, and they describe the class or object in some way. And an attribute may have a domain. Which means that an attribute can take on a value defined by a domain.

For example 'automobile' is a class. Which has an attribute 'color'. While color has a domain of red, white, blue, yellow, orange etc. Thus the attribute 'color' can take on any value from within the domain of colors.

OPERATIONS, METHODS AND SERVICES

An object encapsulates data (represented as a collection of attributes) and the algorithms that process the data. These algorithms are called operations, methods or services.

ENCAPSULATION, INHERITANCE AND POLYMORPHISM

Encapsulation, inheritance and polymorphism are the three characteristics, which differentiate object-oriented paradigm, in a considerable way, from the structured paradigm. Rather these three characteristics are the strong points of the OOD (object oriented design)

• ENCAPSULATION

As object oriented class and objects spawned from the class, which encapsulate data and the operations that work on the data in a single package. This concept of encapsulation provides a number of very important benefits:

1. The internal implementation details of data and procedures are hidden from the outside world. Which reduces the propagation of side effects when changes are incorporated in the software.
2. Data structures and the operations that manipulate them are merged in a single named entity-class. This facilitates component 'Reuse'. And reuse, reuse, reuse is the call of the day.
3. Interfaces among encapsulated objects are simplified. Because an object which sends a message need not be concerned with the details of the internal data structures. Thereby interfacing is simplified.

• INHERITANCE

Inheritance is one of the key elements, which differentiates between the conventional and object-oriented systems. Let us see it's utility through an example.

A subclass Y inherits all the attributes and operations associated with it's super-class X. This means that all data structures and algorithms originally designed and implemented for X are immediately available for Y. And no further work need to dine. That is 'Reuse' has been accomplished directly.

Furthermore, any change to the data and operations contained within a super-class is immediately inherited by all subclasses that have inherited from the super-class. Therefore the class hierarchy becomes a mechanism through which changes (at high level) can be immediately propagated through a system.

It is important to note that, at each level of the class hierarchy, new attributes and operations may be added to those that have been inherited from higher levels on the hierarchy. In fact, whenever a new class has to be created, the software engineer has a number of options:

- The class can be designed and built from scratch. Which means inheritance is not used.

- The class hierarchy can be searched for determining, if a class higher in the hierarchy contains most of the required attributes and operations. The new class inherits from the higher class and additions may then be added, as required.

- The class hierarchy can be restructured so that the new class can inherit the required attributes and operations.

- Characteristics of an existing class can be over-ridden and private versions of attributes and operations are implemented for the new class. Over-ridding occurs when attributes and operations are inherited in the normal manner but are then modified to the specific needs of the new class.

CHAPTER NO. 2

SYSTEM ANALYSIS

INTRODUCTION OF THE INSTITUTION

Women Social Services Organization (W.S.S.O) College for Women consisted of few rooms in **"NASHEMAN** "in 1993, but the need of a vast building was always there .Due to the enthusiasm of the students, increasing population and the increasing number of students, this college was shifted to Welfare School on temporary basis.

By the grace of God Almighty and by the personal interest, sincerity and the struggle of the higher authorities the foundation stone of a splendid building was laid by the respected Chairman **P.O.F Board Maj. Gen. Mehmood Ali Durrani** in June 1996.

The most elegant building of Wah Cantt comprising of four parts was established. The classes were shifted to the campus in August 1997.

The college is situated on the Mall Road in front of Gulistan Colony .The college was affiliated with Islamabad Board of education in 1993 and with Punjab university in 1996-1998.

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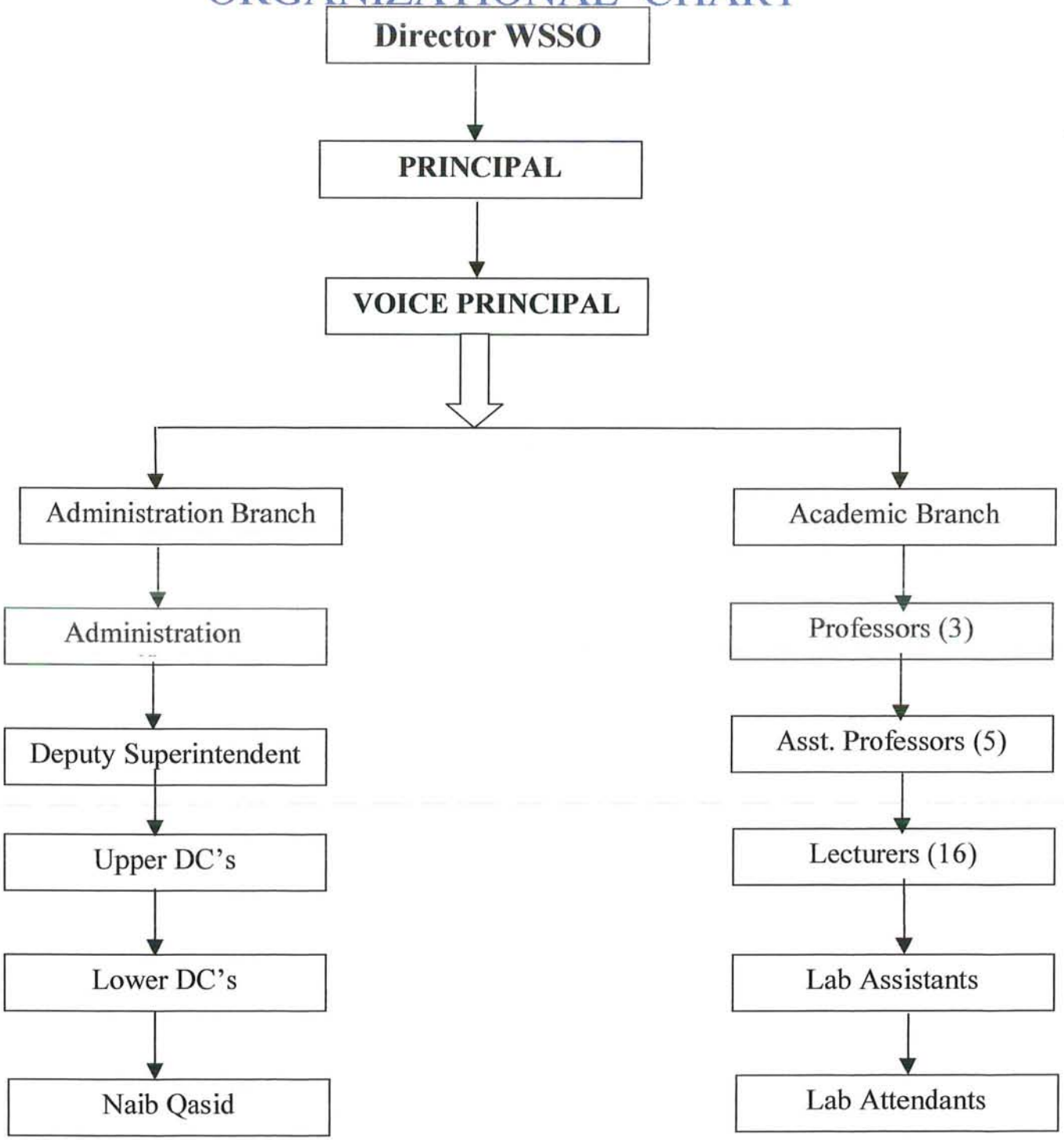
ORGANIZATIONAL CHART



PROBLEM DEFINITION

This dissertation describes the design of a computerized system for the **MASHAL DEGREE COLLEGE FOR WOMEN WAH CANTT**. The basic purpose of this work is to convert the present manual Admission System into computerized one. It will improve results compilation and also provide quick response with reports and queries.

This study has been conducted keeping in view various problems faced by the student and college staff and huge amount of data handling due to the increasing number of candidates for admission to the college.

In view of the fact that computer has rendered immense help and made tremendous contribution in the every field ,a computerized Admission System is designed. The implementation of this system will reduce the manual operations and provide accurate results and efficient data handling.

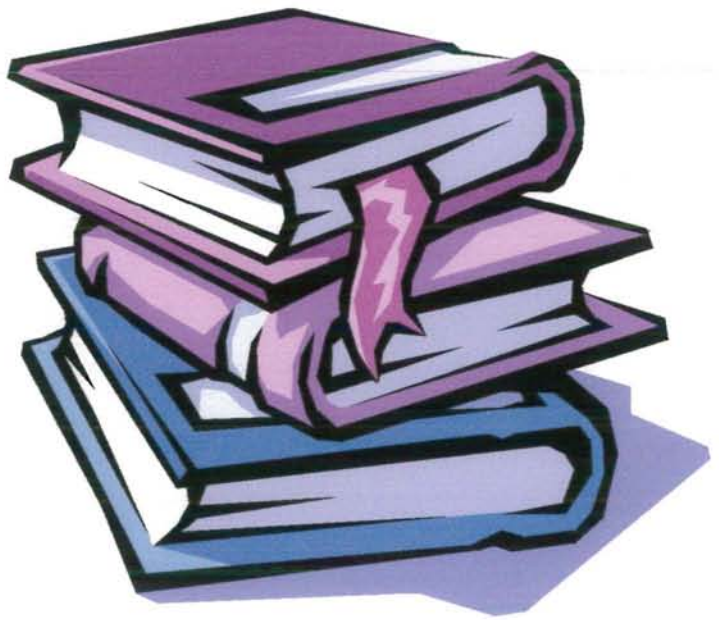
In order to remove these difficulties and hurdles , the objectives of this work were:

- To study the problems which are faced by the staff.
- To find out the drawbacks in the existing system.
- To propose steps in order to overcome the problem and difficulties.
- To design an efficient **STUDENT DATA BANK** system.

NEED FOR COMPUTERIZATION

There is a need that educational institutes should have a well organized, systematic and comprehensive information management system to help the management in running their institutes successfully and efficiently. It is expected that this system will provide the following:

a) Fast ,accurate ,efficient and reliable information to enable the management to make right decision at right time.
b) Security from unauthorized persons by the help of user name , passwords ,so that no one other than the authorized persons can insert , update ,delete or retrieve any record or information.
c) Registers ,paper work and maintain paper files would be replaced by disc files which are reusable ,this reducing the amount of stationary charges to a considerable extent.
d) Insertion and deletion of records in the files of database would become easy and acceptable.



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COLLEGE MANAGEMENT ACTIVITIES

A manual system for college management involves activities relating to student admission system. Following are the procedures which perform these activities.

STUDENT ADMISSION PROCEDURE

When the academic year starts, then from our Secondary School students bring their SSC(Secondary School Certificate) for admission in class XI and HSSC (Higher Secondary School Certificate) for admission in class XIII with conduct to the Admission Cell. This cell issued an admission form and received form fee.

MERIT CRITERIA

Students have to submit the filled forms with in due date. The clerk checks the forms, arranges them in ascending order by obtained marks. Then these forms are handed over to the Admission Committee . Merit list is prepared by this committee and list of selected students is displayed on the notice board.

Merit list is prepared on the basis of following quota:

a) For children of POF employees _____ 60%

b) For civilians _____ 40%

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TOTAL ADMISSIONS EVERY YEAR

1) FIRST YEAR

Pre-Eng	70
Pre-Med	70
G.Sc	70
Arts	250

2) Third Year

G.Sc	100
Arts	150

DUES

CLASS	POF	NON POF
F.A	Rs.2620	Rs.3320
G.Sc	Rs.2660	Rs.3360
Pre_Eng/Pre-Med	Rs.3020	Rs.3920
B.A	Rs.2950	Rs.3700
B.Sc (G.Sc)	Rs.4670	Rs.5420

LIBRARY

This college has a big library with a good collection of books. These books include almost all kinds of books i.e. course books, literature, science, philosophy, Islamic etc. All kinds of daily newspapers are also available in the library.

Students often visit the library and use these books regularly. It play an important role in their studies.

GAMES

There is a big play ground in the college for games. Students play their favorite games in this ground. Games are very useful for the health of students. Every year Inter Colleges games are held in the ground of our college.

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RESULTS

This college is affiliated with FBISE Ibd and Punjab University. Every year students show brilliant results in their exams.

This college is fulfilling all the objectives of its establishment.

Drawbacks In The Existing System

There are so many drawbacks in the existing system but in which some of them are described below:

1) As the information processing is done manually it takes a lot of time to get the required information ,but the chance of errors remains. For example preparation of student's admission record of each student.
2) In the existing system, there is no coordination between the Admission system and Dues system. So the information is placed at different places casing duplication of data. Due to this many problems takes place.
3) As several sections are working simultaneously , if a certain section needs a particular information .It will have to request the other section to provide the required information.
4) Since decisions may need complete information ,if the Principal of the institute wants to take an immediate decision on a particular matter then all the information is to be searched and then a decision is made on the basis of the available information. This take a lot of time .This method of information collection is full of errors and these errors may lead to wrong decision.
5) No scientific methods is applied to collect the required information It is very difficult to compile the huge amount of information about the students ,which are written in registers or in file folders .They will be placed into the files cabinets and cabinets will be placed into different rooms ,making the searching of a particular information difficult.
6) As several steps are involved with several persons engaged in it, causing an increase in chance of errors .When all the stages of Admission and Dues preparation are performed then several different types of reports concerning to students ,classes and

subjects are prepared. As all this is done manually so these are not error free.

7) When a particular information about a particular person is to be inserted ,updated ,deleted or retrieved ,active search is to be performed .This process is so inefficient.

8) It is boring and untidy to locate the particular record ,location and then perform the required operation.

9) To keep all the information of the persons involved in this system ,the institution required huge amount of stationary ,furniture and sufficient number of employees .So much money will be spent on all these.

10) It is difficult to maintain the privacy and security of information because paper files may be easily accessed by the unauthorized persons or may be destroyed or stolen.

Thus a computerized system is proposed to provide accurate reliable and timely information to the management.

CHAPTER NO. 3

SYSTEM DESIGN

INTRODUCTION TO THE PROPOSED SYSTEM

Every new system , whether manual or computerized , that replaces the previous system , bring about some changes. These changes may be in procedures or in documents . In this case manual system of admission and dues , **MASHAL DEGREE COLLEGE (WOMEN) WAH CANTT** proposed to be changed into a computerized system. The proposed system is mainly related to the redesigning of computerized Admission and Dues record keeping and retrieval of student data , files creation and maintenance of the records.

In order to understand the problems and needs of the College Administration for Admission and Dues and other activities records .

Objectives Of The Proposed System

The basic approach in finding the objectives of the proposed system is to start with the existing information structure and find the deficiencies and problems . Keeping these things in mind we tried to find measures for their removal.

Proposed system has been designed after conducting a detailed study of the present system.

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The necessary information and data were collected by having meeting and asking questions from the concerned sections of the school . From previous chapter we came to know the deficiencies and problems faced in the existing system by the users. Solutions to these problems are the main objectives of the proposed system. Following are selected as main objectives of the proposed system.

a. EFFICIENCY

Efficiency is the degree to which we minimize utilization of resources for achieving an object. The proposed system is more efficient than the existing manual system.

b. DATA SECURITY

The data required for decision making is highly sensitive and valuable , therefore, reliability of the proposed system is secured by giving a regular and guaranteed service to the user.

c. TIME FACTOR

As computers have very high speed than manual system, therefore queries and reports can be taken quickly than present system.

d. ACCURACY

The system will provide accurate and error free information , needed for the decision making. It will ensure efficient and accurate record keeping.

e. FLEXIBILITY

The algebra of information processing system is liable to change in terms of objectives , information or processes. The proposed computer system would be sufficiently flexible to cope with such changes.

f. USER FRIENDLY

User will communicate with the system through simple conversations. No specialized computer staff will be required.

g. RELIABILITY

The new system is more reliable than the manual one due to its accuracy, security and fewer periods of inactivity due to communication failures.

h. ECONOMICAL AND PROFITABLE

To implement this system only a data entry operator will be employed. A computer with a printer ,floppy discs and printing papers are needed, which will be more economical than the existing system. Also it will be attractive for public, because of its exceptional features.

i. EFFICIENT DATA COLLECTION AND STORAGE

Scientific methods are applied for the collection of required information. The format of forms is readable and flow of information is logical. Screens use the format of the data collection forms and sheets. So data entry will become very easy and efficient. Floppy discs will be used to store data which are safe , reliable and reusable.

j. QUICK INFORMATION PROCESSING AND REPORT GENERATION

As information processing is electronic, it takes a little time to get the required information also the chances of errors are reduced to a great extent. For example the preparation of students Admission which is for more fast and error free than the manual system and their retrieval is also very quick. Also if we want to see the record of a specific student, just enter the Ad. No. of the student along with its class ,you will see the record of that student.

When particular information about a particular person is to be inserted, updated, deleted or retrieved , just enter the record key ,the record will be displayed and will be ready to perform any operation.

Thus the proposed computerized system will accurate , reliable and provide timely information for the management staff of the educational institutes.

The Proposed System

This system covers only those aspects which directly or indirectly relates to the students .The proposed system has been designed after conducting a detailed study of the present system. The proposed system is developed in a move powerful software tool which is more efficient ,reliable and economical than the present system.

Software Selection

The choice of software is very important and depends upon the problems, which the current system is facing. This is because of various facilities provided by different languages and packages after a lot of considerations OBJECT ORIENTED PROGRAMMING LANGUAGE (C++) is proposed to be quite appropriate.

FEATURES OF THE PROPOSED SYSTEM

This section previews the characteristics of the proposed system.

- Menu based system
- User interface
- Input specifications
- Output specifications
- Queries
- Reports
- Flexibility
- Software selection
- Hardware selection

MENU BASED SYSTEM

Proposed system will be menu based .A main menu will be displayed first with option, user can select any option according to his requirements .In this way, this system will become easy to use.

USER INTERFACE

The most important aspect for the success of any system is that it must be very attractive to the user. i.e. system must be user friendly , for better and attractive user iteration ; options are displayed in well-designed manner . Input screen is designed in a way that the user will feel easy whole entering data.

The use of Keyboard and Mouse will minimize the problem. Just just selecting of the listed options will fill most of the entries.

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INPUT SPECIFICATIONS

Most of the entries will be filled just by selecting one of the listed options. Some inputs are constant for each record . They will be entered in the system once then there is no need to enter them again and again.

OUTPUT SPECIFICATIONS

The output of the system is in the form of reports to be printed on the paper and queries to be displayed on the screen.

QUERIES

One major purpose of establishing a database is to retrieve information quickly. Queries are the standard that retrieve the information on the screen in any combination i.e. data within various records can be displayed in any combination. Queries in the proposed system have been provided, keeping in mind, the questions that may be arise in the user's mind regarding retrieval of desired information from the system.

REPORTS

Reports are also a form of query that is printed on paper The reports produced by the system are well formatted, detailed and according to the user requirement .The report could also be helpful for the management of institution progress as well as individuals progress.

FLEXIBILITY

There is flexibility to extend or enhance the software in order to meet the new needs of the administration. This software can be extended and applicable on other subjects also.

SOFTWARE SELECTION

Software selection is very important and it depends upon the problem that you are going to solve. There are three aspects of database : input, output and the program that manages all the options and storage of information. Out of these three programming is the most important as it controls both input and output activities and storage of information inside the database. Thus it is very important to choose a suitable software . Different

languages and packages provided different features .After a lot of combinations OBJECT ORIENTED PROGRAMMING LANGUAGE (C++) and GRAPHICS is selected for the development of the proposed system .

HARDWARE CONSIDERATION

The hardware and operating system requirements for the proposed system are:

Main processor : 500 MHz
Main memory : 256 MB
Hard disk : 40 GB
Monitor : VGA color digital monitor
Printer : Dot Matrix / Laser
Operating system : windows 98

CHAPTER NO. 4

SOFTWARE WORKING

INTRODUCTION

Having designing the system, the next step is its development involves the realization of the actual system. In development phase system is built to meet the proposed and designed specification. This development phase focuses on how this realization is done. During development, software developer needs to describe how.

Date structures and architectures are to be designed.

Procedural details are to be implemented the design will be translated into programming language and testing will be performed. The system-developed activities include preparation of plan to make the system operational. During the implementation phase working personnel are trained and preparation is made for changing over from a project environment to an operational environment.

DEVELOPMENT PHASE

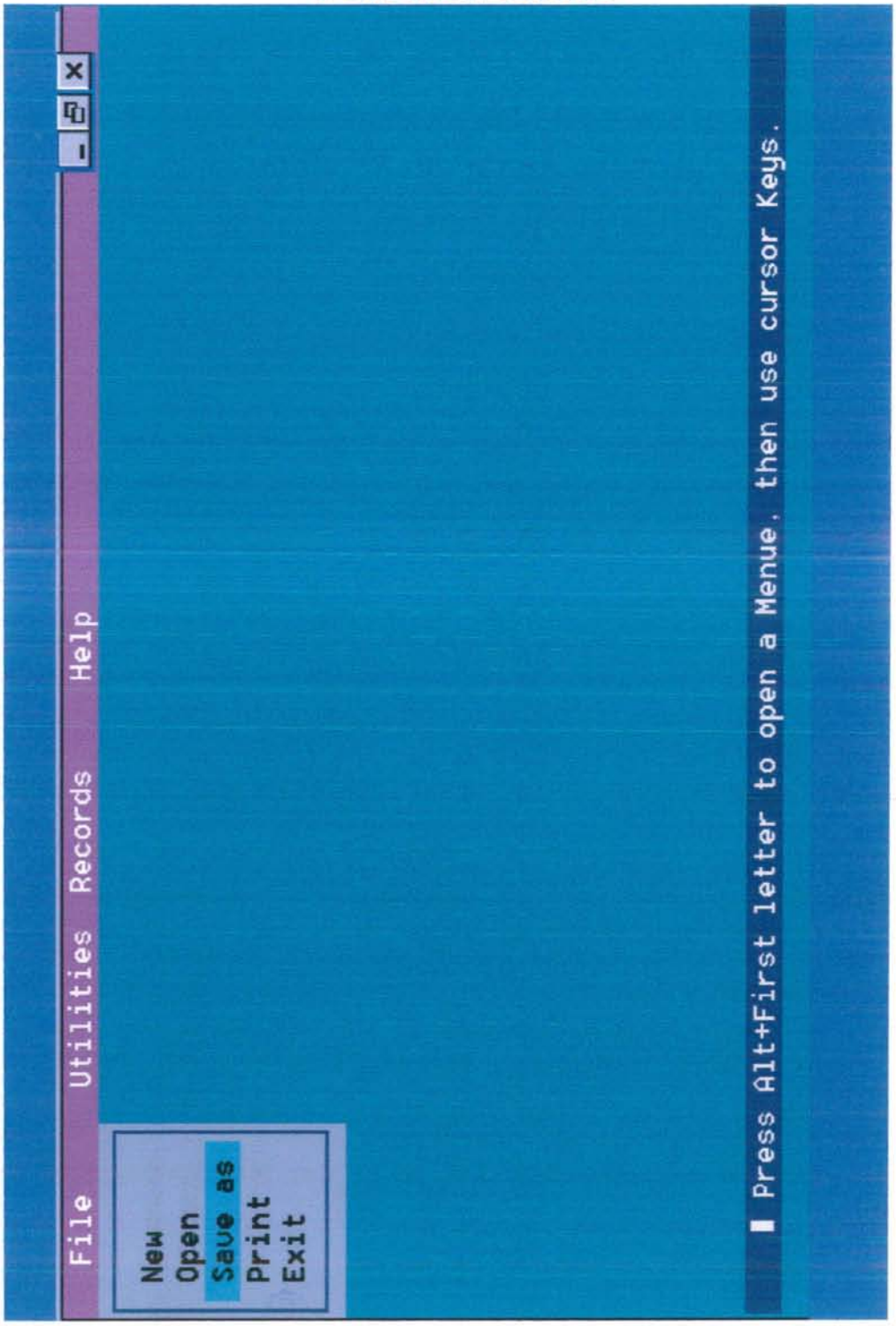
The methods applied during the S/W, development phase very according to the software paradigm applied. However, the most important steps are:

- Selecting the development approach. Implementing the data base design. Choosing the appropriate software development tool.
- Developing application to store and retrieve information from the database.
- Testing of developed application with sample date for debugging.
- Producing only desired output in a desired way.

HOW ADMISSION SYSTEM WORKS

1. NAVIGATING SCREENS

FOR KEYBOARD



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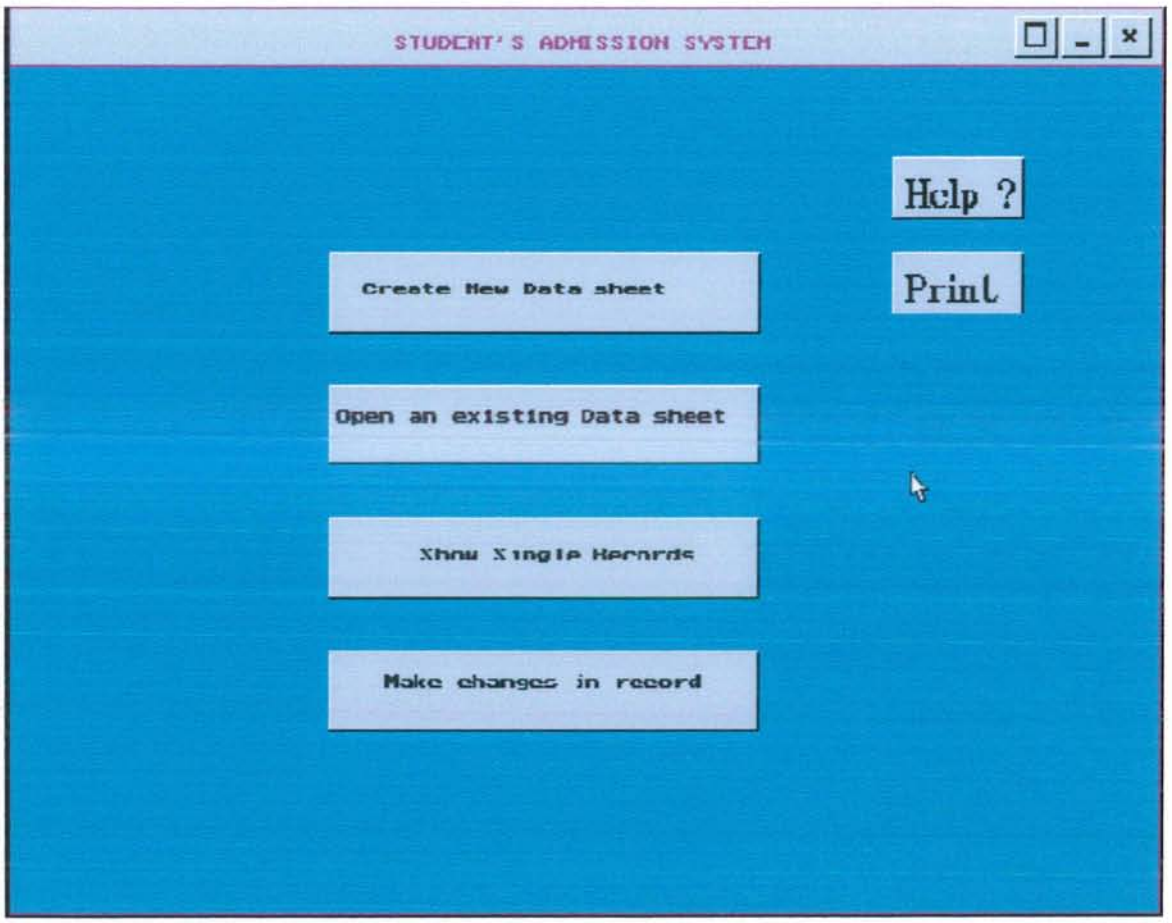
• FOR MOUSE



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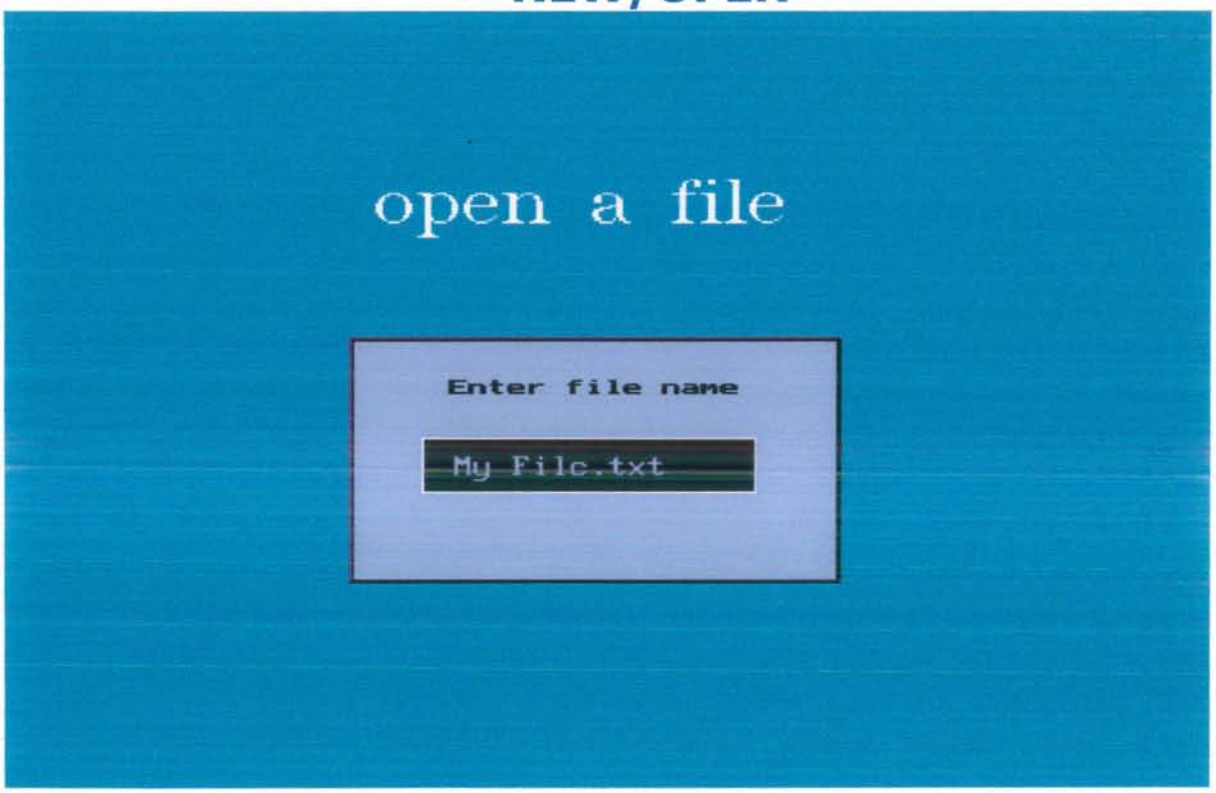
2. SCREENS OF FILE MENU

- **NEW/OPEN**



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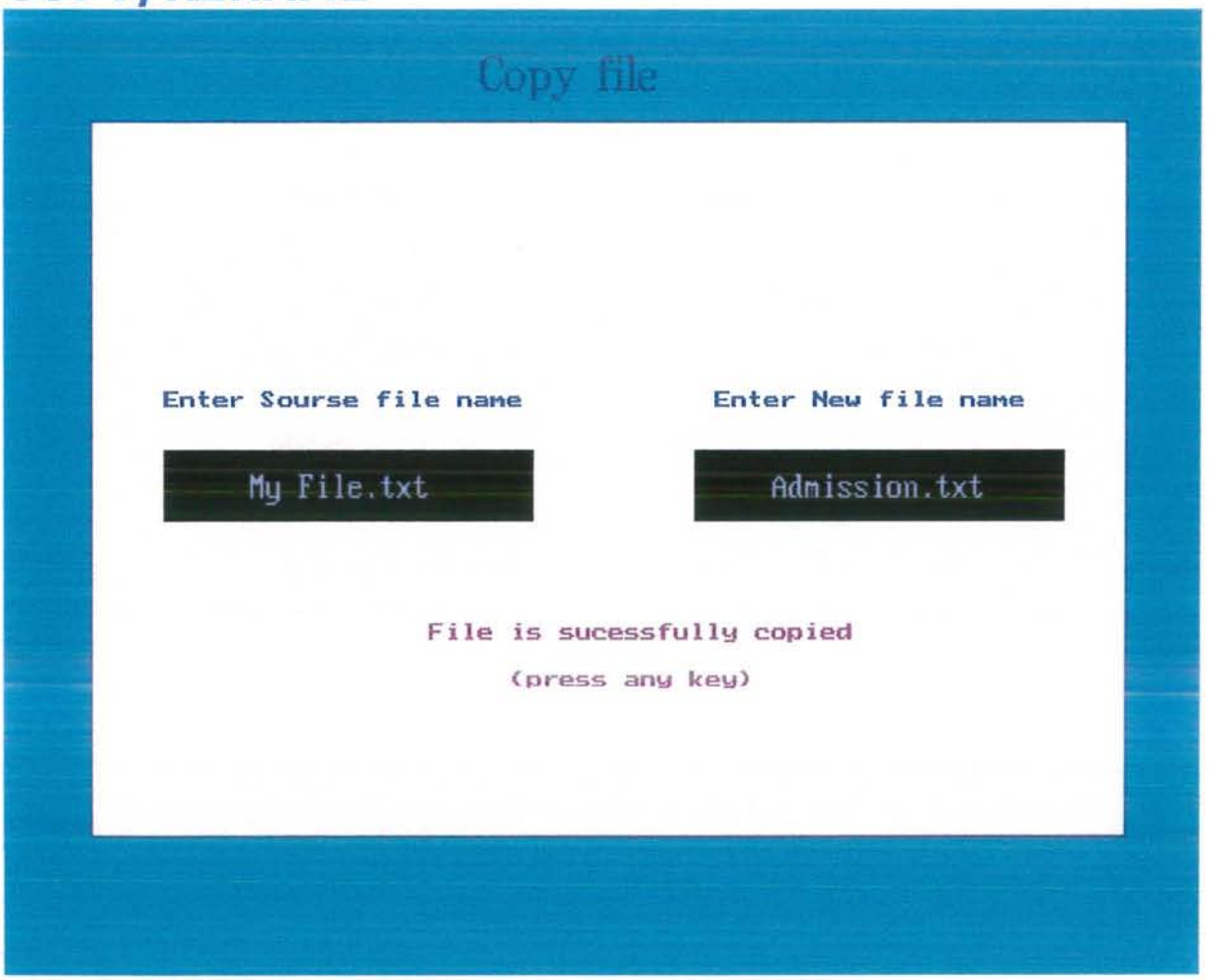
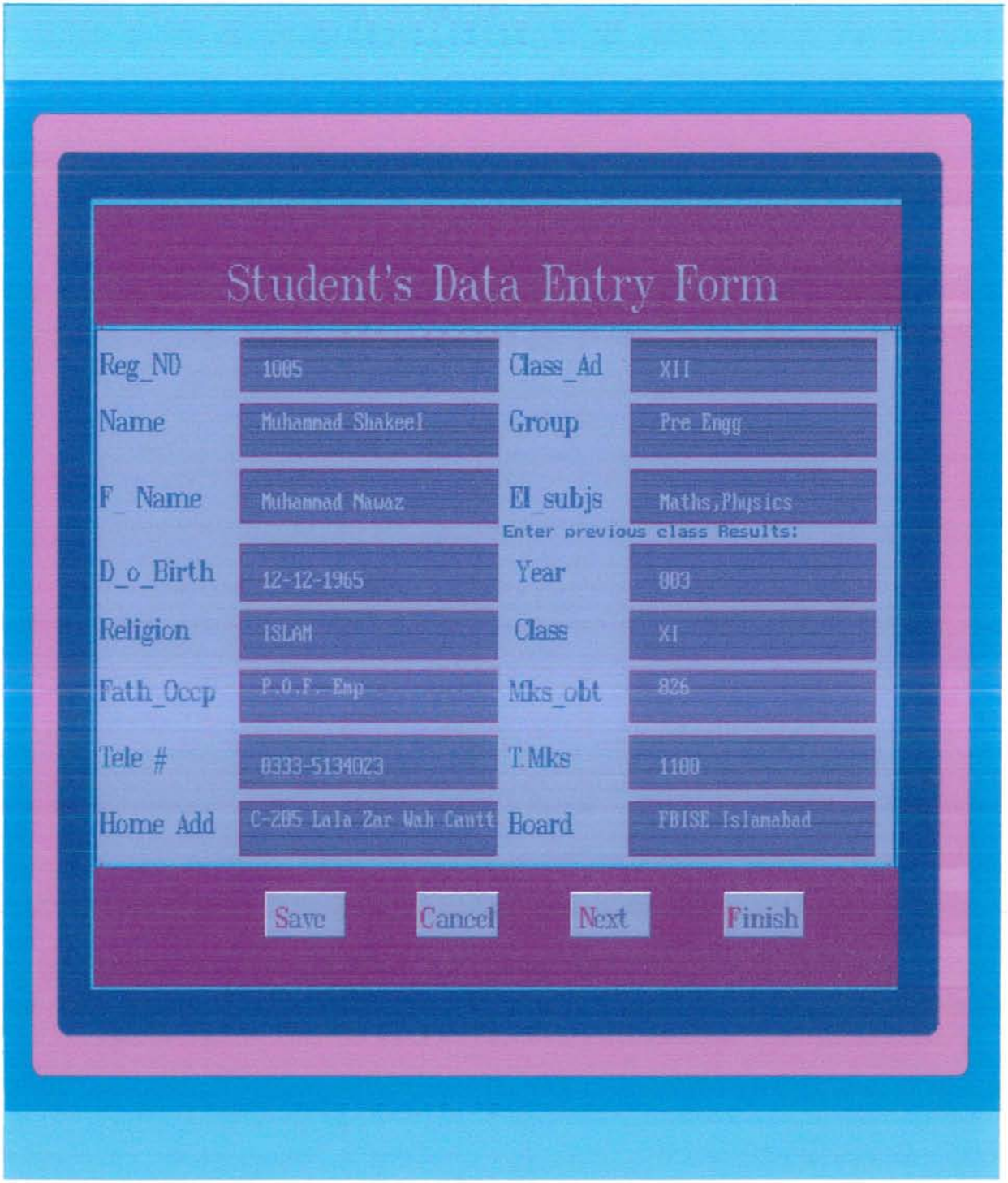
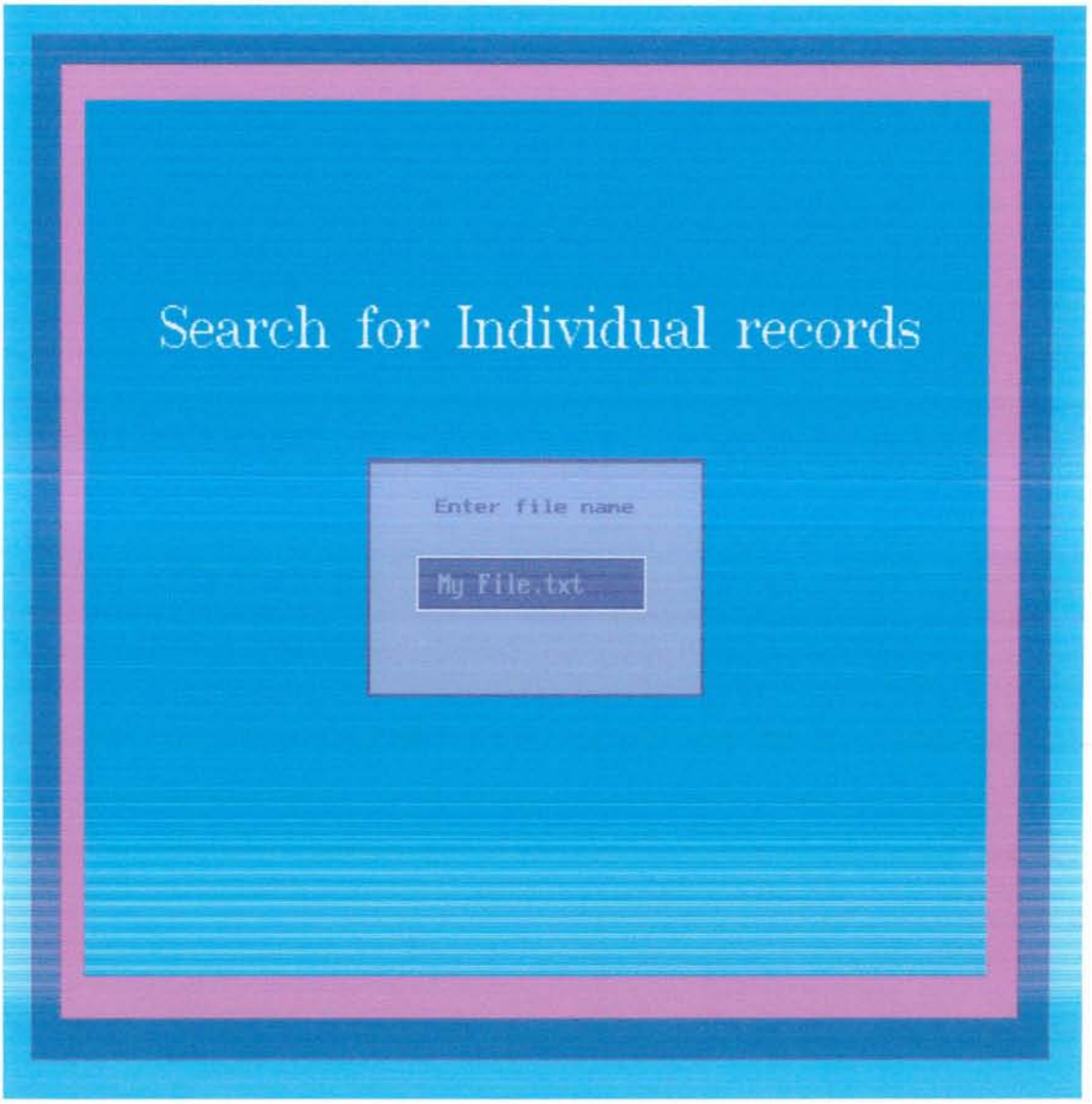
COPY/RENAME



DATA ENTRY FORM



SEARCH



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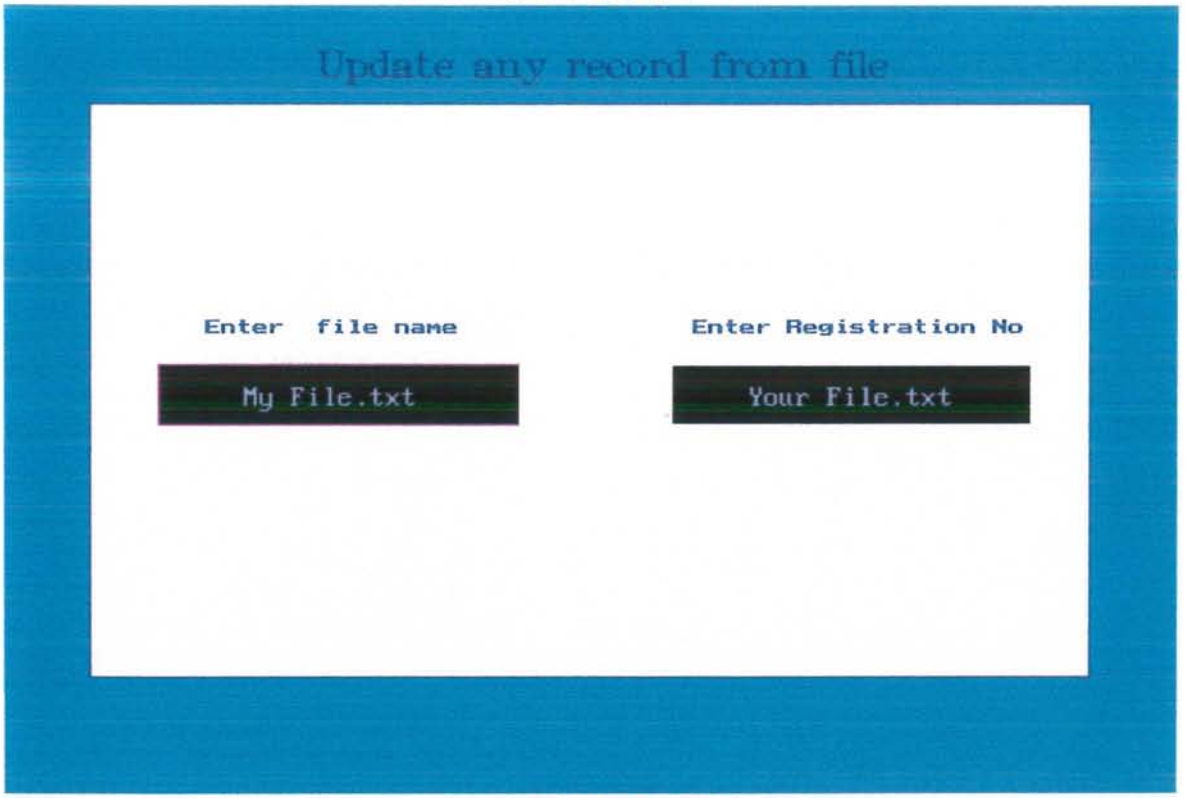
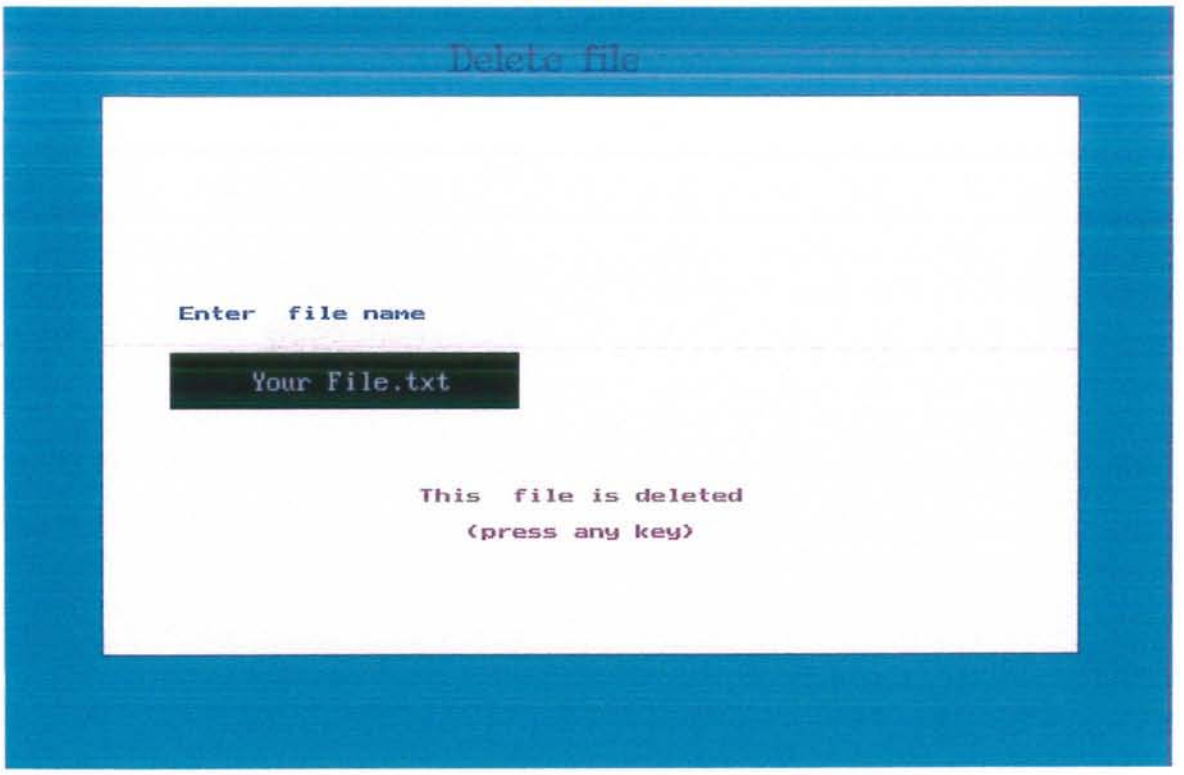
UPDATE



DELETE

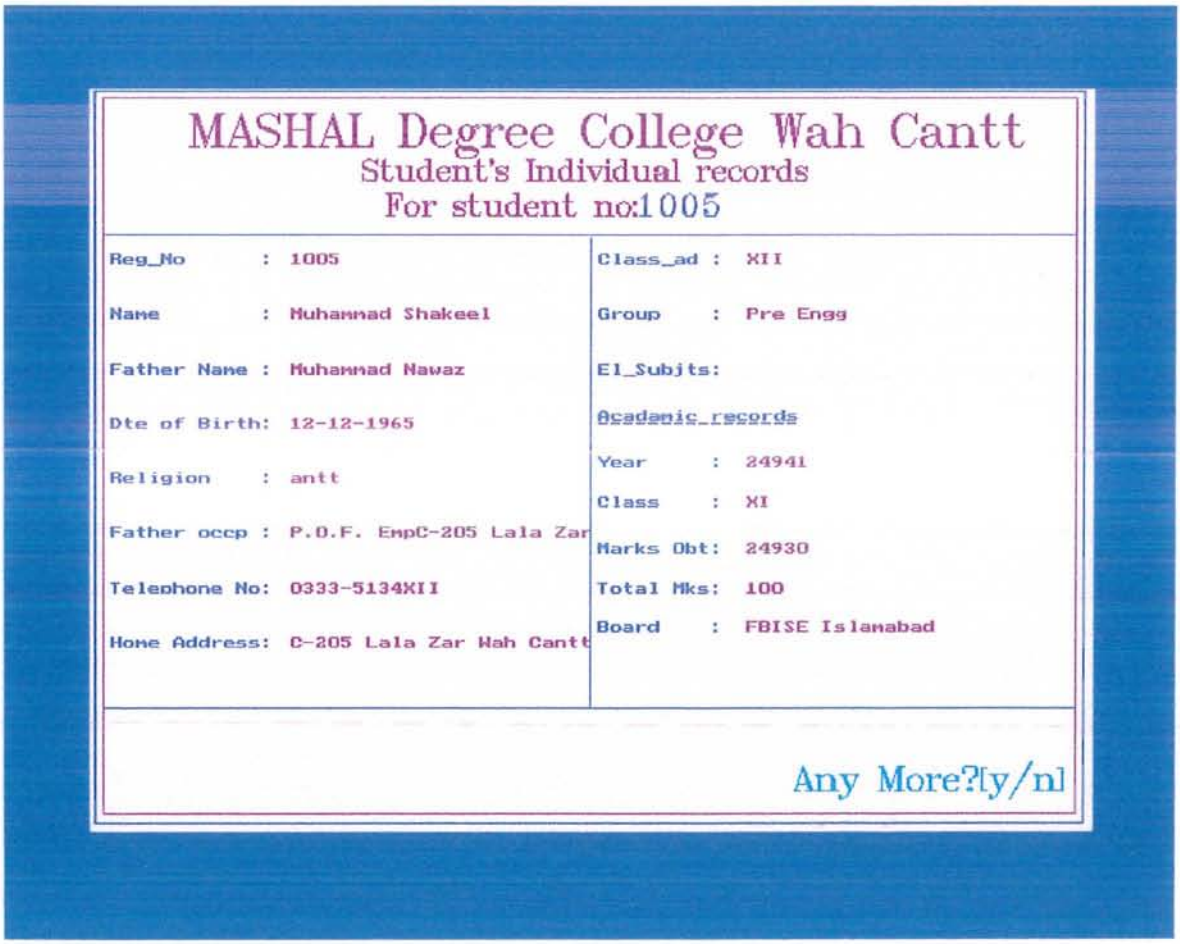


4. RECORD SCREENS

- **COLLECTIVE**

WSSO MASHAL DEGREE COLLEGE						
STUDENTS COLLECTIVE RECORDS						
REG NO	NAME	F.NAME	CLASS	YEAR	Marks Obt	Total Marks
1004	Asif	Saeed	X	2000	528	850
1005	Adnan	Sharif	X	2000	623	850
1006	Ahmad	Sajid	XI	2001	702	1100
1007	Akbar	Waheed	XII	2002	659	1100
1008	Atif	Wasif	X	2000	426	850
1009	Ali	Kamran	X	2000	710	850
1110	Babar	Qamar	X	2000	695	850
1111	Bakar	Tamur	X	2000	654	850
1112	Bassit	Mansoor	XI	2001	550	1100
1113	Bilal	Raza	XII	2002	450	1100
1114	Chema	Asif	XII	2002	726	1100
1115	Noman	Adnan	XI	2001	845	1100
1116	Kamran	Ahmad	X	2000	661	850
1117	Qamar	Akbar	X	2000	689	850
1118	Tamur	Atif	XI	2001	885	1100
1119	Mansoor	Ali	XI	2001	825	1100
1120	Raza	Babar	XI	2001	769	1100
1121	Shakeel	Bakar	X	2000	615	850
1122	Sharif	Bassit	X	2000	612	850
1123	Sajid	Bilal	X	2000	512	850
1124	Waheed	Chema	X	2000	598	850
1125	Wasif	Noman	X	2000	590	850

- **INDIVIDUAL**


MASHAL Degree College Wah Cantt
Student's Individual records
For student no:1005
Reg_No : 1005
Name : Muhammad Shakeel
Father Name : Muhammad Nawaz
Dte of Birth: 12-12-1965
Religion : antt
Father occp : P.O.F. EmpC-205 Lala Zar
Telephone No: 0333-5134XII
Home Address: C-205 Lala Zar Wah Cantt
Class_ad : XII
Group : Pre Engg
El_Subjts:
Academic_records
Year : 24941
Class : XI
Marks Obt: 24930
Total Mks: 100
Board : FBISE Islanabad
Any More?[y/n]

HELP SCREENS

HELP

How to enter data in the data entry form:

1. Religion	:	muslim , non-muslim
2. Father occupation	:	pof , non-pof
3. Class of admission	:	xi , xiii
4. Group	:	sc. , arts
5. Previous Class	:	ssc , hssc
6. Elective subjects	:	Enter following codes

g1.	pre-eng.	g2.	pre-med.
g3.	math,stat,eco/phy	g4.	eco,h.eco,soci
g5.	edu,soci,hist/civ	g6.	psy/edu,islm,eng/urdu
g7.	h.eco,islm,civ/psy.	g8.	hist/soci,islm,P.E.

For BA/B.Sc:

g9.	math,stat,eco.	g10.	stat,eco,islm.
g11.	h.eco,soci,islm/eng/urdu	g12.	edu,p.sc,eng/urdu/islm.
g13.	islm,edu,eng/urdu	g14.	hist,soci,islm
g15.	edu,islm,eng/urdu.	g16.	h.eco,p.sc,eng/urdu/islm.

About

Admission System
Version 1.0
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Product ID: AF254-TR985-QWE32OZP
This Product is Licensed to
Safeer Akhtar & Muhammad Shakeel
Q.A.U Islamabad

CHAPTER NO.5

SOURCE CODE

```
/*(++++++++++++++++++++++++STUDENTS DATA BANK++++++++++++++++++++++++++++++
////////*PREPAIRED BY :MUHAMMAD SHAKEEL & SAFEER AKHTER (PGD-2.FGEI) ///////*/
#include <stdlib.h>
#include <alloc.h>
#include<iostream.h>
#include  <conio.h>
#include  <stdio.h>
#include <string.h>
#include   <dos.h>
#include   <math.h>
#include<graphics.h>
#include   <mem.h>
#include <process.h>
//++++++++++++++++++++
#define UL unsigned long
#define UI unsigned int
#define UC unsigned char
#define  num_menus    4
#define  TRUE         1
#define  FALSE        0
#define  L_ARRO       75
#define  R_ARRO       77
#define  U_ARRO       72
#define  D_ARRO       80
#define  PGUP         73
#define  PGDN         81
#define ESCAPE        27
#define MAX_COLS      80
#define MAX_ROWS      25
#define MAX LINES     23
#define MENU_WIDTH    11
#define TITLE_LENGTH  20
#define FIELD_LENGTH  80
#define PROMPT_LENGTH 80
#define MAX_ITEMS     10
#define OK            0
#define YES_NO        1
//+-----------------------------------------------------------------------------
union REGS i, o ;
int xC,yC,st_angle,end_angle,xR,yR,radius,chs,chs1,chs3;
FILE *fp,*ftp,*fp1;
char *fn,*ftn,*fn1;
char fname[9],ftname[9],f1name[9],ext[6]={'\0','.','d','a','t','\0'},c,st[45];
char *menu_name[num_menus]={"  File","  Utilities","  Records","   Help"};
int  menu_name_alt[num_menus]={33,22,19,35};
char *menu_item[num_menus][MAX_ITEMS]={
            { " New "," Open "," Save as "," Print "," Exit "},
            { " Update  "," Erase  "," Search "},
            {" C_All "," Single "," Delete "},
            {" About ", " Index "," Pasword " }
            };
```

```
char recno[8],nam[20],ca[10],pc[5],chs2;
int num_items[num_menus]= {5,3,3,3};
int menus_active;
int hpos;
int vpos;
char string[MAX_COLS+1];
//++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++-
void start();
void title();
void loading();
void choice();
int ShowBMP(int x, int y, char* FileName);
void make_menus();
void display_bar();
void display_menu();
void draw_box(int left,int top, int width, int height);
char get_code();
void menu_action(char *name);
void mouse_menues();
void mouse_menues1();
initmouse();
void show();
void hide();
void getmousepos( int *button, int *x, int *y );
void drawlions();
void draw1(int bco,int x1,int y1,int x2,int y2,int fc,int bc,int tc);
void create();
void box ();
void box_i();
void box_s();
void box2();
void box3();
void single();
void box1();
void box_h();
void menue ();
void menue1();
void sheet();
void sheet1();
void table1();
void table2();
void table3();
void table4();
void table5();
void table6();
void table7();
void chang ();
void copy_f();
void sav_as();
void ren_f();
void update_r();
```

```
void del_rec();
void erase_f();
void help();
void about();
void print();
void boxa();
void boxaa();
void boxa1();
void boxa2();
void boxb1();
void boxb2();
void boxc();
void boxf();
void help2();
void help3();
void sys_login();
void chang_psw();
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
struct  student
{char  regno[7],name[20],fname[20],foccp[10],add[20],relig[11],dob[12],
      phno[9],cl_ad[5],gp[10],es[4],clas[5],bord[10];                          //name[20],des[16],en[2]
 int   year,mkobt,tmks; }std;
struct pasword
{ char psw[15];
 }p;
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++-
///\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++-
/******/  void main()
/******/  {
/******/    clrscr();
/******/    int gdriver = DETECT, gmode, errorcode,color;
/******/    initgraph(&gdriver,&gmode,"C:\\tc\\bgi");
/******/    sys_login();
/******/    //start();
/******/    //title();
/******/    //loading();
/******/    choice();
/******/    closegraph();
/******/    getch();
/******/  }
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++-
//\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++-
typedef struct
{char Type[2];
     UL Size;
     UI R1;
     UI R2;
     UL OffSet;
 }BMP1;
```

```
typedef struct
{ UL headsize;
  UL Hlen;
  UL Vlen;
  UI planes;
  UI BPP;
  UL Method;
  UL BmpSize;
  UL HRes;
  UL VRes;
  UL Colors;
  UL IColors;
  }BMP2;
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
void start()
{
 int x1,y1,c,n1,E;
 for(n1=0;n1<3000;n1++)
    { x1=random(640);
      y1=random(480);
      c=random(15);
      putpixel(x1,y1,c);
    }
 delay(500);
 settextstyle(10,0,7); outtextxy(50,170,"WEL COME");delay(500);
 for(int i=50;i<1000;i+=50)
 { sound(i);delay(300);nosound();}
    cleardevice();
    if(!ShowBMP(0,0,"1st.bmp")) E=1;delay(300);
    if(!ShowBMP(0,0,"2nd.bmp")) E=1; delay(300);
    if(!ShowBMP(0,0,"3rd.bmp")) E=1;delay(300);
    if(!ShowBMP(0,0,"4th.bmp")) E=1; delay(300);
    if(E) printf("\nError : Unable to open file.");
    else printf(" ");
    cleardevice();
    setcolor(15);
  for(i=0;i<9;i++)
    {
    cleardevice();
    settextstyle(DEFAULT_FONT,HORIZ_DIR,i);
    setcolor(i);
    outtextxy( 20,40,"A PROJECT");
    delay(200);
    }
  for (i=0;i<9;i++)
    {
    cleardevice();
    settextstyle(DEFAULT_FONT,HORIZ_DIR,i);
    setcolor(i);
    outtextxy( 30,80,"OF");
    delay(200);
```

```
  }
for (i=0;i<9;i++)
  {
   cleardevice();
   settextstyle(DEFAULT_FONT,HORIZ_DIR,i);
   setcolor(i);
   outtextxy( 40,100,"OBJECT");
   delay(200);
   }
for (i=0;i<9;i++)
   {
   cleardevice();
   settextstyle(DEFAULT_FONT,HORIZ_DIR,i);
   setcolor(i);
   outtextxy( 50,120,"ORIENTED");
   delay(200);
   }
for (i=0;i<7;i++)
   {
   cleardevice();
   settextstyle(DEFAULT_FONT,HORIZ_DIR,i);
   setcolor(i);
   outtextxy( 60,140,"PROGRAMMING");
   delay(300);
   }
for (i=0;i<50;i++)
   {
   setcolor(9);
   rectangle(100,200,100+i*9,203);
   delay(50);
   }
   rectangle(110,300,510,420);
   settextstyle(2,HORIZ_DIR,5);
   moveto(260,310);
   setcolor(MAGENTA);
   outtext("PROGRAMMERS");
   settextstyle(2,HORIZ_DIR,6);
   setcolor(RED);
   outtextxy(150,330,"      MUHAMMAD SHAKEEL ");
   outtextxy(150,360,"           and       ");
   outtextxy(150,390,"       SAFEER AKHTER   ");
   i=0;
   rectangle(30,30,600,430);
   rectangle(33,33,603,433);
while(!kbhit())
   {
   setcolor(i);
   rectangle(110,300,510,420);
   delay(200);
   i++;
   }
```

```
    getch();
    }
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
void title()
{
    int aa,bb;
    int maxx = getmaxx();
    int maxy = getmaxy();
    cleardevice();
    int a[22]={0,0,0,0,0,0,0,0,0,0,8,7,3,14,15,15,15,14,3,7,8};
    int i=7,g=7;        setbkcolor(1);
    setfillstyle(1,15);  bar(0,0,maxx,maxy);
    setfillstyle(1,7);   bar(110,160,540,340);
    setfillstyle(1,8);   bar(130,180,520,320);
    setfillstyle(1,0);   bar(150,200,500,300);
    setlinestyle(0,0,3); setcolor(0);
    moveto(110,340);
    lineto(110,160);     lineto(540,160);
    setcolor(15);
    lineto(540,340);     lineto(110,340);
    setcolor(0);         moveto(130,320);
    lineto(130,180);     lineto(520,180);
    setcolor(15);
    lineto(52 lineto(130,320);
    setcolor(0);         moveto(150,300);
    lineto(150,200);     lineto(500,200);
    setcolor(15);
    lineto(500,300);     lineto(150,300);
    setlinestyle(0,0,1);
    setcolor(8);         moveto(151,297);
    lineto(151,201);     lineto(497,201);
    setcolor(7);         moveto(541,159);
    lineto(541,341);     lineto(109,341);
    setfillstyle(1,1);
    bar(30,70,300,120);
    setlinestyle(2,0,3); setcolor(12);
    rectangle(30,70,300,120);
    setcolor(11);        settextstyle(7,0,4);
    outtextxy(40,70,"Supervised By:");
    setlinestyle(0,0,1);
    setcolor(10);
    line(35,105,285,105); line(35,107,285,107);
    setcolor(1);
    int k=0;long l;
    for(l=0;l<140;l++,k++)
    {
    circle(40+k*2,125+l*2,5);
    if(k==5)
    k=0;
    delay(10);
    }
```

```
k=0;
for(l=0;l<280;l++,k++)
{
circle(40+l*2,395+k*2,5);
if(k==5)
k=0;
delay(10);
}
k=5;
for(l=165;l>0;l--,k--)
{
circle(590+k*2,75+l*2,5);
if(k==0)
k=5;
delay(10);
}
k=5;
for(l=280;l>130;l--,k--)
{
circle(40+l*2,75+k*2,5);
if(k==0)
k=5;
delay(10);
}
settextstyle(7,0,4);
while(!kbhit())
 {
 g++;
 if(g==22) g=0; i=g;
 setcolor(a[i]);
 moveto(171,227);
 outtext("M");  i--; if (i == -1) i=21; setcolor(a[i]);
 outtext("r");  i--; if (i == -1) i=21; setcolor(a[i]);
 outtext(".");  i--; if (i == -1) i=21; setcolor(a[i]);
 outtext(" ");
 outtext("N");  i--; if (i == -1) i=21; setcolor(a[i]);
 outtext("a");  i--; if (i == -1) i=21; setcolor(a[i]);
 outtext("z");  i--; if (i == -1) i=21; setcolor(a[i]);
 outtext("i");  i--; if (i == -1) i=21; setcolor(a[i]);
 outtext("m");  i--; if (i == -1) i=21; setcolor(a[i]);
 outtext("-");  i--; if (i == -1) i=21; setcolor(a[i]);
 outtext("u");  i--; if (i == -1) i=21; setcolor(a[i]);
 outtext("d");  i--; if (i == -1) i=21; setcolor(a[i]);
 outtext("-");  i--; if (i == -1) i=21; setcolor(a[i]);
 outtext("d");  i--; if (i == -1) i=21; setcolor(a[i]);
 outtext("i");  i--; if (i == -1) i=21; setcolor(a[i]);
 outtext("n");  i--; if (i == -1) i=21; setcolor(a[i]);
 delay(250);
 }
 getch();
 }
```

```
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
void loading()
{ cleardevice();
  setcolor(0);
  rectangle(5,5,633,474);
  setfillstyle(1,15);
  floodfill(7,200,1);
  setcolor(0);
  rectangle (112,388,535,422);
  setcolor(15);
 line(298,41,298,121);
  settextstyle(4,0,8);
  setcolor(4);
 outtextxy(100,155," LOADING ");
 setcolor(3);
 settextstyle(4,0,8);
 outtextxy(145,170,".....");
  setfillstyle(1,1);
  setcolor(1);
  settextstyle(2,0,5);
  outtextxy(110,340,"Please Wait....");
  outtextxy(110,362,"This may take several seconds, depending upon your system");
  int xp=115,xf=168;
  for(int n=0 ;n<14;n++)
 {bar(xp,392,xf,418);
  delay(100);
  xp=xf;   xf=xf+26;
  bar(xp,392,xf,418);
  sound(300);delay(700);nosound();
  delay(100);
  }
  delay(300);
  }
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
void choice()
{
cleardevice();
box1();
setcolor(1); settextstyle(1,0,4);
outtextxy(100,150,"      Select Device  ");
setcolor(9); settextstyle(1,0,3);
outtextxy(100,250,"   (1).Key Board     (2).Mouse  ");
char ch=getch();
switch(ch)
{case '1': make_menus();
                break;
 case '2': mouse_menues();break;
 default:  outtextxy(100,35,"Enter correct choice: ");
}
getch();
}
```

```
//+++++++++++++++++++++++++< Display BMP >+++++++++++++++++++++++++++++++
int ShowBMP(int x, int y, char* FileName)
{ int b,a;
  BMP1 Obj1;
  BMP2 Obj2;
  UC * Holder;
  int in=0;
  UC c=0;
  FILE * fp;
  fp = fopen(FileName,"rb");
  if(fp==NULL)
  return 0;
fread(&Obj1, sizeof(Obj1), 1, fp);
fread(&Obj2, sizeof(Obj2), 1, fp);
  if(Obj2.BPP!=4)
  { fclose(fp);
    return 0;
  };
fseek(fp,Obj1.OffSet,SEEK_SET);
Holder=(UC *) calloc(Obj2.Hlen/2+1, sizeof(UC));
  for(b=Obj2.Vlen;b>=0;b--)
  {fread(Holder, sizeof(UC), Obj2.Hlen/2, fp);
   c=0;
   in=0;
   for(a=0;a<=Obj2.Hlen;a+=2)
   {c = (Holder[in] | 0x00) >>4;
    putpixel(a+x,b+y,c);
    c = (Holder[in] | 0xF0) & 0x0F;
    putpixel(a+1+x,b+y,c);
    in++;
    }
    }
    free (Holder);
    fclose(fp);
    return 1;
    }
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
void make_menus()
{restorecrtmode();
 clrscr();
 int j;
 int extcode;
 textbackground(2);
 _setcursortype(_NOCURSOR);
 clrscr();
 menus_active=FALSE;
 display_bar();
while(TRUE)
{ if(menus_active)
 { switch(get_code())
  { case L_ARRO:
```

```
    vpos=0;
    hpos=(hpos>0) ? --hpos : num_menus-1;
    display_bar();//(num_menus, menu_name);
    display_menu();
    break;
   case R_ARRO:
   vpos=0;
   hpos=(hpos<num_menus-1) ? ++hpos : 0;
   display_bar();//(num_menus, menu_name);
   display_menu();
   break;
   case U_ARRO:
   vpos=(vpos>0) ? --vpos : num_items[hpos]-1;
   display_menu();//(menu_item, num_items);
   break;
   case D_ARRO:
   vpos=(vpos<num_items[hpos]-1) ? ++vpos : 0;
   display_menu();//(num_menus, menu_name);(menu_item, num_items);
   break;
   case '\r':
   menus_active=FALSE;
   display_bar();
   menu_action(menu_item[hpos][vpos]);
   vpos=0;
   break;
   case ESCAPE:
   vpos=0;
   menus_active=FALSE;
   display_bar();
   break;
   }
    }
else
{
 extcode=get_code();
 switch(extcode)
 {
case '\r':
  break;
  case PGUP:
  case PGDN:
  case U_ARRO:
  case D_ARRO:
  break;
  default :
  for(j=0; j<num_menus; j++)
  if(extcode==menu_name_alt[j])
  {menus_active=TRUE;
  hpos=j;
  display_bar();//(num_menus, menu_name);
  display_menu();//(menu_item, num_items);
```

```
  }
  break;
  }
  }
  }
 getch();
 }
//+=========================================================================+=
void display_bar()
{
 int j;
 textbackground(3); clrscr();
 gotoxy(1,1);
 clreol();
for(j=0;j<num_menus;j++)
 {
 gotoxy(5,j+5);
 gotoxy( 1+(j*MENU_WIDTH),1 );
 if(j==vpos && menus_active)
 clreol();
 textbackground(6);
 textcolor(14);
 cputs(menu_name[j]);
 clreol();
 }
 textbackground(1);
 gotoxy(1,24); clreol();   textcolor(15);
 cprintf("    Þ Press Alt+First letter to open a Menue, then use cursor Keys. ");
 sound(400);delay(150);nosound();
 }
//+=========================================================================+-
void display_menu()
{
 delay(50);
 int j;
 draw_box((hpos*MENU_WIDTH)+1,2,MENU_WIDTH,2+num_items[hpos]);
 textbackground(7);
 textcolor(0);
 for(j=0; j<num_items[hpos]; j++)
 {if(j==vpos)
  textbackground(10);
  gotoxy(2+(hpos*MENU_WIDTH),j+3);
  cputs(menu_item[hpos][j]);
  textbackground(7);
    }
   }
//+=========================================================================+-
void draw_box(int left,int top, int width, int height)
{
 int j;
 textbackground(7);
```

```
 textcolor(1);
 for( j=1;j<width-1;j++)
  string[j]='\xC4';
  string[width]= '\0';
  string[0]='\xDA';
  string[width-1]= '\xBF';
  gotoxy(left,top);
  cputs(string);
  string[0]='\xC0';
  string[width-1]= '\xD9';
  gotoxy(left,top+height-1);
  cputs(string);
  for( j=1;j<width-1;j++)
  string[j]='\x20';
  string[0]='\xB3';
  string[width-1]= '\xB3';
  for( j=1;j<height-1;j++)
  {gotoxy(left,top+j);
   cputs(string);
    }
   }
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
char get_code()
{
  char key;
  if ( (key=getch()) ==0) return (getch());
  else if ( key=='\r')    return (key);
  else if ( key==ESCAPE)  return (key);
  else sound(200);delay(500);nosound();
  return 0;
 }
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++=
void menu_action(char *name)
{
 textbackground(1);
 textcolor(14);
 gotoxy(1,24);
 clreol();
 if (strcmp(name," New ")==0)
 { create();make_menus(); }
 else if (strcmp(name," Open ")==0)
 { sheet(); make_menus();}
 else if (strcmp(name," Save as ")==0)
 { sav_as(); make_menus();}
 else if(strcmp(name," Print ")==0)
 { print();make_menus();}
 else if (strcmp(name," Exit ")==0)
 exit(0);
 else if(strcmp(name," Update  ")==0)
 {update_r();make_menus();}
 else if (strcmp(name," Erase  ")==0)
```

```
{erase_f();make_menus();}
else if (strcmp(name," Search ")==0)
{single();make_menus();}
else if(strcmp(name," C_All ")==0)
{sheet();make_menus();}
else if(strcmp(name," Single ")==0)
{single();make_menus();}
else if(strcmp(name," Delete ")==0)
{del_rec();make_menus();}
else if(strcmp(name," About ")==0)
{ about(); make_menus(); }
else if(strcmp(name, " Index " )==0)
{ help(); make_menus(); }
else if(strcmp(name," Pasword ")==0)
{chang_psw();make_menus();}
}
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++-
void mouse_menues()
{//setgraphmode(getgraphmode());
int x1,y1,c,n1;
int x, y, button ;
initmouse( );
menue();
while(1)
{ show();
 getmousepos ( &button, &x, &y ) ;
 if(x>180 &&  x<415  && y>130 && y<170 && button==1 )
 {hide();
  draw1(7,180,130,415,170,7,15,0);
  setcolor(4);
  outtextxy(198,145,"  Create New data sheet");
  delay(500);
  create();
  menue ();
  }
 else draw1(7,180,130,415,170,7,0,15);
 show();
 getmousepos ( &button, &x, &y ) ;
if(x>180 &&  x<415  && y>200 && y<240 && button==1 )
 { hide();
   draw1(7,180,200,415,240,7,15,0);
   setcolor(4);
   outtextxy(183,214," Open an existing Data sheet");
   delay(500);
   sheet();
   menue ();
  }
 else draw1(7,180,200,415,240,7,0,15);
 show();
 getmousepos ( &button, &x, &y ) ;
 if(x>180 &&  x<415  && y>270 && y<310 && button==1 )
```

```
{ hide();
  draw1(7,180,270,415,310,7,15,0);
  setcolor(4);
  outtextxy(220,285,"Show single records");
  delay(500);
  single();
  menue();
}
else draw1(7,180,270,415,310,7,0,15);
show();
getmousepos ( &button, &x, &y ) ;
if(x>180 &&  x<415  && y>340 && y<380 && button==1 )
{// hide();
 draw1(7,180,340,415,380,7,15,0);
 setcolor(4);
 outtextxy(210,355,"Make changes in record");
 delay(500);
 chang();
 menue ();
 }
else   draw1(7,180,340,415,380,7,0,15);
 show();
 getmousepos ( &button, &x, &y ) ;
 if(x>490 &&  x<560  && y>80&& y<110 && button==1 )
 { hide();
   draw1(7,490,80,560,110,7,15,0);
   setcolor(4);
   settextstyle(1,0,2);
   outtextxy(496,85,"Help ?");
   delay(500);
   help();
   menue ();
 }
else  draw1(7,490,80,560,110,7,0,15);
 show();
 getmousepos ( &button, &x, &y ) ;
 if(x>490 &&  x<560  && y>130&& y<160 && button==1 )
 { hide();
   draw1(7,490,130,560,160,7,0,15);
   setcolor(4);
   settextstyle(1,0,2);
   outtextxy(496,135,"Print");
   delay(500);
   print();
   menue ();
 }
else  draw1(7,490,80,560,110,7,0,15);
 show();
 getmousepos ( &button, &x, &y ) ;
 if(x>610 &&  x<630  && y>5 && y<25 && button==1)
 {draw1(8,610,5,630,25,7,15,0);
```

```
  delay(500);
  exit(0);
  }
  }
  }
 // initialises mouse
initmouse( )
{//tgraphmode(getgraphmode());
  i.x.ax = 0 ;//ax=accomulator reg,x=access specifier,i=inregs//
  int86 ( 0x33, &i, &o ) ;//intrupt//
  return ( o.x.ax ) ;
 }
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
void mouse_menues1()
{//setgraphmode(getgraphmode());
int x1,y1,c,n1;
int x, y, button ;
initmouse( );
menue1();
while(1)
{ show();
  getmousepos ( &button, &x, &y ) ;
 if(x>150 &&  x<550  && y>130 && y<400 && button==1 )
 {hide();
  draw1(7,100,100,540,400,7,15,0);
  setcolor(4);
  settextstyle(1,0,4);
/*outtextxy(200,120,"W.S.S.O");
  outtextxy(120,170,"MASHAL DEGREE COLLEGE");
  outtextxy(200,220,"WAH CANTT");
  outtextxy(198,245,"STUDENTS DATA BANK");*/
  delay(500);
  choice();
  menue ();
  }
else
  show();
  getmousepos ( &button, &x, &y ) ;
  if(x>610 &&  x<630  && y>5 && y<25 && button==1)
  {draw1(8,610,5,630,25,7,15,0);
   delay(500);
   exit(0);
 }
  }
  }
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++-
 // displays mouse pointer
void show( )
 {// setgraphmode(getgraphmode());
  i.x.ax = 1 ;//visible//
  int86 ( 0x33, &i, &o ) ;
```

```
}
//++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++-
void hide( )
 {// setgraphmode(getgraphmode());
  i.x.ax = 2 ; //hide//
  int86 ( 0x33, &i, &o ) ;
 }
//++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++-
 /* gets mouse coordinates and button status */
void getmousepos ( int *button, int *x, int *y )
 {  //setgraphmode(getgraphmode());
  i.x.ax = 3 ;//to load the position of mouse//
  int86 ( 0x33, &i, &o ) ;
  *button = o.x.bx ;//o=out reg,bx(base reg)=click info//
  *x = o.x.cx ;//cx=info about x coardinate//
  *y = o.x.dx ;//dx=info of y coardinates//
  }
//++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++-
void draw1 (int bco,int x1,int y1,int x2,int y2,int fc,int bc,int tc)//tp=tp color,bc=base color,fc=fill color,b
{// setgraphmode(getgraphmode());
  setcolor(bco);
//  bar(x1,y1,x2,y2);
  rectangle(x1,y1,x2,y2);
  setfillstyle(1,fc);
  floodfill(x1+3,y1+3,bco);
  setcolor(tc);
  line(x1-1,y1-1,x2+1,y1-1);
  line(x1-1,y1-1,x1-1,y2+1);
  setcolor(bc);
  line(x1-1,y2+1,x2+1,y2+1);
  line(x2+1,y1,x2+1,y2+1);
  }
//++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++-
void  drawlions()
{//setgraphmode(getgraphmode());
   setcolor(1);
   rectangle(5,5,633,474);
   setcolor(4);
   rectangle(10,10,628,468);
 }
//++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++-
void create ()
{setgraphmode(getgraphmode());
  box_i();
  fp=fopen(fn,"ab");
  do{str:
    cleardevice();
    settextstyle(1,0,1);
    setfillstyle(1,11);
    bar(1,1,639,479);
    setcolor(0);
```

```
rectangle(0,0,640,480);
rectangle(4,4,636,76);
rectangle(4,79,211,401);
rectangle(425,79,640,401);
rectangle(4,404,636,476);
line(5,170,210,170);
drawlions();
setfillstyle(1,5);
bar(5,5,635,75);
bar(5,405,635,475);
setfillstyle(1,7);
bar(7,80,320,400);
box2();
setfillstyle(1,7);
bar(321,80,631,400);
box3();
setcolor(1);
rectangle(6,79,632,401);
draw1(7,140,420,200,445,7,0,15);
setcolor(4);
outtextxy(148,422,"S");
setcolor(0);
outtextxy(158,422,"ave");
draw1(7,260,420,320,445,7,0,15);
setcolor(4);
outtextxy(262,422,"C");
setcolor(0);
outtextxy(274,422,"ancel");
draw1(7,380,420,440,445,7,0,15);
setcolor(4);
outtextxy(386,422,"N");
setcolor(0);
outtextxy(398,422,"ext");
draw1(7,500,420,560,445,7,0,15);
setcolor(4);
outtextxy(502,422,"F");
setcolor(0);
outtextxy(514,422,"inish");
settextstyle(1,0,4);
setcolor(7);
outtextxy(110,30,"Student's Data Entry Form");
setcolor(9);
settextstyle(1,0,1);
outtextxy(9,88,"Reg_N0  ");
outtextxy(9,122,"Name  ");
outtextxy(9,168,"F_ Name  ");
outtextxy(9,213,"D_o_Birth  ");
outtextxy(9,248,"Religion  ");
outtextxy(9,285,"Fath_Occp ");
outtextxy(9,325,"Tele # ");
outtextxy(9,365,"Home Add ");
```

```
outtextxy(330,88,"Class_Ad ");
outtextxy(330,122,"Group  ");
outtextxy(330,168,"El_subjs  ");
settextstyle(0,0,1);
outtextxy(326,198,"Enter previous class Results:");
settextstyle(1,0,1);
outtextxy(335,213,"Year  ");
outtextxy(335,248,"Class  ");
outtextxy(330,285,"Mks_obt ");
outtextxy(330,325,"T.Mks ");
outtextxy(330,365,"Board ");
gotoxy(18,7);
gets(std.regno);
gotoxy(18,9);
gets(std.name);
gotoxy(18,12);
gets(std.fname);
gotoxy(18,15);
gets(std.dob);
gotoxy(18,17);
gets(std.relig);
gotoxy(18,19);
gets(std.foccp);
gotoxy(18,22);
gets(std.phno);
gotoxy(17,24);
gets(std.add);
gotoxy(57,7);
gets(std.cl_ad);
gotoxy(57,9);
gets(std.gp);
gotoxy(57,12);
gets(std.es);
gotoxy(57,15);
gets(st);
std.year=atoi(st);
gotoxy(57,17);
gets(std.clas);
gotoxy(57,19);
gets(st);
std.mkobt= atoi(st);
gotoxy(57,22);
gets(st);
std.tmks=atoi(st);
gotoxy(57,24);
gets(std.bord);
c=getch();
if(c=='s'||c=='S')
{fwrite(&std,sizeof(std),1,fp);
draw1(7,140,420,200,445,7,15,0);
setcolor(4);
```

```
    outtextxy(148,422,"Save");
    delay(500);
    draw1(7,140,420,200,445,7,0,15);
    setcolor(4);
    outtextxy(148,422,"S");
    setcolor(0);
    outtextxy(158,422,"ave");
    }
    if (c=='c'||c=='C')
    { draw1(7,260,420,320,445,7,15,0);
    setcolor(2);
    outtextxy(262,422,"C");
    setcolor(2);
    outtextxy(274,422,"ancel");
    delay(500);
    goto str;
    }
    c=getch();
    if ( c=='n'||c=='N' )
    { draw1(7,380,420,440,445,7,15,0);
    setcolor(1);
    outtextxy(386,422,"N");
    setcolor(1);
    outtextxy(398,422,"ext");
    draw1(7,500,420,560,445,7,0,15);
    delay(600);
    }
    if ( c=='f'||c=='F')
    { draw1(7,500,420,560,445,7,15,0);
    setcolor(4);
    outtextxy(148,422,"Finish");
    delay(500);
    draw1(7,500,420,560,445,7,15,0);
    setcolor(4);
    outtextxy(502,422,"F");
    setcolor(0);
    outtextxy(514,422,"inish");
    draw1(7,500,420,560,445,7,0,15);
    delay(500);
    }
    }while (c=='n'||c=='N');
    fclose(fp);//close file function
    //getch();
    }
//++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++-
void box ()
{setgraphmode(getgraphmode());
 cleardevice();
 setcolor(0);
 draw1(15,1,1,639,479,3,15,15);
 settextstyle(1,0,4);
```

```
 outtextxy(240,110,"open a file");
 setcolor(0);
 settextstyle(0,0,1);
 draw1(0,230,200,430,320,7,0,5);
 outtextxy(270,220,"Enter file name");
 draw1(0,260,250,395,275,0,15,15);
 drawlions();
 gotoxy(35,17);
 gets(fname);
 fn=strcat(fname,ext);
 }
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
void box_i()
{setgraphmode(getgraphmode());
 cleardevice();
 setcolor(0);
 draw1(15,1,1,639,479,3,15,15);
 settextstyle(1,0,4);
 outtextxy(240,110,"Create a file");
 setcolor(0);
 settextstyle(0,0,1);
 draw1(0,230,200,430,320,7,0,5);
 outtextxy(270,220,"Enter file name");
 draw1(0,260,250,395,275,0,15,15);
 drawlions();
 gotoxy(35,17);
 gets(fname);
 fn=strcat(fname,ext);
 }
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
void box_s ()
{setgraphmode(getgraphmode());
 cleardevice();
 setcolor(0);
 draw1(15,1,1,639,479,3,15,15);
 settextstyle(1,0,4);
 outtextxy(105,110,"Search for Individual records");
 setcolor(0);
 settextstyle(0,0,1);
 draw1(0,230,200,430,320,7,0,5);
 outtextxy(270,220,"Enter file name");
 draw1(0,260,250,395,275,0,15,15);
 drawlions();
 gotoxy(35,17);
 gets(fname);
 fn=strcat(fname,ext);
 }
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
void box2()
{draw1(0,120,85,320,115,0,5,5);
 draw1(0,120,125,320,155,0,5,5);
```

```
 draw1(0,120,165,320,195,0,5,5);
 draw1(0,120,210,320,242,0,5,5);
 draw1(0,120,250,320,277,0,5,5);
 draw1(0,120,286,320,315,0,5,5);
 draw1(0,120,325,320,355,0,5,5);
 draw1(0,120,365,320,395,0,5,5);
 }
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
void box3()
{draw1(0,425,85,615,115,0,5,5);
 draw1(0,425,125,615,155,0,5,5);
 draw1(0,425,165,615,195,0,5,5);
 draw1(0,425,210,615,242,0,5,5);
 draw1(0,425,250,615,277,0,5,5);
 draw1(0,425,286,615,315,0,5,5);
 draw1(0,425,325,615,355,0,5,5);
 draw1(0,425,365,615,395,0,5,5);
 }
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
void single()
{setgraphmode(getgraphmode());
long int rn;
char cc;
 box_s();
star: if((fp=fopen(fn,"rb"))==NULL)
   { outtextxy(245,295,"This file does'texist");
     getch();
   }
else
 {
  cleardevice();
  setfillstyle(1,3);
  bar(1,1,639,479);
  setcolor(1);
  settextstyle(1,0,4);
  outtextxy(190,210,"Search Record");
  help3();boxa1();
  switch(chs2)
  {case 'a':
   do
   { clrscr();cleardevice();
     setfillstyle(1,15);
     bar(0,0,640,480);
     drawlions();
     setcolor(4);
     settextstyle(1,0,4);
     outtextxy(65,10,"MASHAL Degree College Wah Cantt ");
     settextstyle(1,0,2);
     outtextxy(175,43,"Student's Individual records ");
     (fread(&std,sizeof(std),1,fp)==1);
     settextstyle(1,0,2);
```

```
outtextxy(190,65,"For student no:  ");
setcolor(9);
line(10,97,628,97);
outtextxy(350,65,std.regno);
settextstyle(0,0,1);
outtextxy(15,110,"Reg_No      :");
setcolor(4);
outtextxy(130,110,std.regno);
setcolor(9);
outtextxy(15,145,"Name        :");
setcolor(4);
outtextxy(130,145,std.name);
setcolor(9);
outtextxy(15,180,"Father Name :");
setcolor(4);
outtextxy(130,180,std.fname);
setcolor(9);
outtextxy(15,215,"Dte of Birth:");
setcolor(4);
outtextxy(130,215,std.dob);
setcolor(9);
outtextxy(15,250,"Religion    :");
setcolor(4);
outtextxy(130,250,std.relig);
setcolor(9);
outtextxy(15,285,"Father occp :");
setcolor(4);
outtextxy(130,285,std.foccp);
setcolor(9);
outtextxy(15,320,"Telephone No: ");
setcolor(4);
outtextxy(130,320,std.phno);
setcolor(9);
outtextxy(15,355,"Home Address:");
setcolor(4);
outtextxy(130,355,std.add);
setcolor(9);
line(10,400,628,400);
line(320,100,320,400);
outtextxy(325,110,"Class_ad :");
setcolor(4);
outtextxy(420,110,std.cl_ad);
setcolor(9);
outtextxy(325,145,"Group    :");
setcolor(4);
outtextxy(420,145,std.gp);
setcolor(9);
outtextxy(325,180,"El_Subjts:");
setcolor(4);
if(strcmp(std.es,"g1")==0)
outtextxy(425,180,"pre-eng");
```

```
else if(strcmp(std.es,"g2")==0)
outtextxy(425,180,"pre-med");
else if(strcmp(std.es,"g3")==0)
outtextxy(425,180,"math,stat,eco/phy.");
else if(strcmp(std.es,"g4")==0)
outtextxy(425,180,"eco,h.eco,soci.");
else if(strcmp(std.es,"g5")==0)
outtextxy(425,180,"edu,soci,hist.");
else if(strcmp(std.es,"g6")==0)
outtextxy(425,180,"psy,islm,eng/urdu.");
else if(strcmp(std.es,"g7")==0)
outtextxy(425,180,"h.eco,islm,civ.");
else if(strcmp(std.es,"g8")==0)
outtextxy(425,180,"hist,islm,P.E.");
else if(strcmp(std.es,"g9")==0)
outtextxy(425,180,"mathG,stat,eco.");
else if(strcmp(std.es,"g10")==0)
outtextxy(425,180,"stat,eco,islm.");
else if(strcmp(std.es,"g11")==0)
outtextxy(425,180,"h.eco,soci,islm.");
else if(strcmp(std.es,"g12")==0)
outtextxy(425,180,"edu,p.sc,islm/eng.");
else if(strcmp(std.es,"g13")==0)
outtextxy(425,180,"edu,islm,eng/urdu.");
else if(strcmp(std.es,"g14")==0)
outtextxy(425,180,"hist,soci,eng/urdu.");
else if(strcmp(std.es,"g15")==0)
outtextxy(425,180,"edu,islm,eng/urdu.");
else if(strcmp(std.es,"g16")==0)
outtextxy(425,180,"h.eco,p.sc,islm.");
setcolor(9);
outtextxy(325,210,"Acadamic records");
outtextxy(325,215,"----------------");
outtextxy(325,240,"Year     :");
setcolor(4);
itoa(std.year,st,10);
outtextxy(420,240,st);
setcolor(9);
outtextxy(325,265,"Class    :");
setcolor(4);
outtextxy(420,265,std.clas);
setcolor(9);
outtextxy(325,295,"Marks Obt:");
setcolor(4);
itoa(std.mkobt,st,10);
outtextxy(420,295,st);
setcolor(9);
outtextxy(325,320,"Total Mks:");
setcolor(4);
itoa(std.tmks,st,10);
outtextxy(420,320,st);
```

```
settextstyle(1,0,2);
outtextxy(175,43,"Student's Individual records ");
settextstyle(1,0,2);
outtextxy(190,65,"For student no:  ");
setcolor(9);
line(10,97,628,97);
outtextxy(350,65,std.regno);
settextstyle(0,0,1);
setcolor(9);
outtextxy(15,110,"Reg_No      :");
setcolor(4);
outtextxy(130,110,std.regno);
setcolor(9);
outtextxy(15,145,"Name        :");
setcolor(4);
outtextxy(130,145,std.name);
setcolor(9);
outtextxy(15,180,"Father Name :");
setcolor(4);
outtextxy(130,180,std.fname);
setcolor(9);
outtextxy(15,215,"Dte of Birth:");
setcolor(4);
outtextxy(130,215,std.dob);
setcolor(9);
outtextxy(15,250,"Religion    :");
setcolor(4);
outtextxy(130,250,std.relig);
setcolor(9);
outtextxy(15,285,"Father occp :");
setcolor(4);
outtextxy(130,285,std.foccp);
setcolor(9);
outtextxy(15,320,"Telephone No: ");
setcolor(4);
outtextxy(130,320,std.phno);
setcolor(9);
outtextxy(15,355,"Home Address:");
setcolor(4);
outtextxy(130,355,std.add);
setcolor(9);
line(10,400,628,400);
line(320,100,320,400);
outtextxy(325,110,"Class_ad :");
setcolor(4);
outtextxy(420,110,std.cl_ad);
setcolor(9);
outtextxy(325,145,"Group    :");
setcolor(4);
outtextxy(420,145,std.gp);
setcolor(9);
outtextxy(325,180,"El_Subjts:");
```

```
setcolor(4);
if(strcmp(std.es,"g1")==0)
outtextxy(425,180,"pre-eng");
else if(strcmp(std.es,"g2")==0)
outtextxy(425,180,"pre-med");
else if(strcmp(std.es,"g3")==0)
outtextxy(425,180,"math,stat,eco/phy.");
else if(strcmp(std.es,"g4")==0)
outtextxy(425,180,"eco,h.eco,soci.");
else if(strcmp(std.es,"g5")==0)
outtextxy(425,180,"edu,soci,hist.");
else if(strcmp(std.es,"g6")==0)
outtextxy(425,180,"psy,islm,eng/urdu.");
else if(strcmp(std.es,"g7")==0)
outtextxy(425,180,"h.eco,islm,civ.");
else if(strcmp(std.es,"g8")==0)
outtextxy(425,180,"hist,islm,P.E.");
else if(strcmp(std.es,"g9")==0)
outtextxy(425,180,"mathG,stat,eco.");
else if(strcmp(std.es,"g10")==0)
outtextxy(425,180,"stat,eco,islm.");
else if(strcmp(std.es,"g11")==0)
outtextxy(425,180,"h.eco,soci,islm.");
else if(strcmp(std.es,"g12")==0)
outtextxy(425,180,"edu,p.sc,islm/eng.");
else if(strcmp(std.es,"g13")==0)
outtextxy(425,180,"edu,islm,eng/urdu.");
else if(strcmp(std.es,"g14")==0)
outtextxy(425,180,"hist,soci,eng/urdu.");
else if(strcmp(std.es,"g15")==0)
outtextxy(425,180,"edu,islm,eng/urdu.");
else if(strcmp(std.es,"g16")==0)
outtextxy(425,180,"h.eco,p.sc,islm.");
setcolor(9);
outtextxy(325,210,"Acadamic records");
outtextxy(325,215,"----------");
outtextxy(325,240,"Year     :");
setcolor(4);
itoa(std.year,st,10);
outtextxy(420,240,st);
setcolor(9);
outtextxy(325,265,"Class    :");
setcolor(4);
outtextxy(420,265,std.clas);
setcolor(9);
outtextxy(325,295,"Marks Obt:");
setcolor(4);
itoa(std.mkobt,st,10);
outtextxy(420,295,st);
setcolor(9);
outtextxy(325,320,"Total Mks:");
setcolor(4);
```

```
    itoa(std.tmks,st,10);
    outtextxy(420,320,st);
    setcolor(9);
    outtextxy(325,345,"Board    :");
    setcolor(4);
    outtextxy(420,345,std.bord);
    setcolor(9);
    line(250,440,350,440);
    setcolor(1);
    outtextxy(260,447,"Principal");
    }
   else
    outtextxy(390,145,"This record not exist");
    }
    getch();goto star;
case 'c':
   boxb2();
   while(fread(&std,sizeof(std),1,fp)==1)
   { if(strncmp(nam,std.name,1)==0)
  { rn=(rn-1)*sizeof(std);
    clrscr();  cleardevice();
    setfillstyle(1,15);
    bar(0,0,640,480);
    drawlions();
    setcolor(4);
    settextstyle(1,0,4);
    outtextxy(65,10,"MASHAL Degree College Wah Cantt ");
    settextstyle(1,0,2);
    outtextxy(175,43,"Student's Individual records ");
    settextstyle(1,0,2);
    outtextxy(190,65,"For student no:  ");
    setcolor(9);
    line(10,97,628,97);
    outtextxy(350,65,std.regno);
    settextstyle(0,0,1);
    setcolor(9);
    outtextxy(15,110,"Reg_No      :");
    setcolor(4);
    outtextxy(130,110,std.regno);
    setcolor(9);
    outtextxy(15,145,"Name        :");
    setcolor(4);
    outtextxy(130,145,std.name);
    setcolor(9);
    outtextxy(15,180,"Father Name :");
    setcolor(4);
    outtextxy(130,180,std.fname);
    setcolor(9);
    outtextxy(15,215,"Dte of Birth:");
    setcolor(4);
    outtextxy(130,215,std.dob);
    setcolor(9);
```

```
outtextxy(15,250,"Religion    :");
setcolor(4);
outtextxy(130,250,std.relig);
setcolor(9);
outtextxy(15,285,"Father occp :");
setcolor(4);
outtextxy(130,285,std.foccp);
setcolor(9);
outtextxy(15,320,"Telephone No: ");
setcolor(4);
outtextxy(130,320,std.phno);
setcolor(9);
outtextxy(15,355,"Home Address:");
setcolor(4);
outtextxy(130,355,std.add);
setcolor(9);
line(10,400,628,400);
line(320,100,320,400);
outtextxy(325,110,"Class_ad :");
setcolor(4);
outtextxy(420,110,std.cl_ad);
setcolor(9);
outtextxy(325,145,"Group    :");
setcolor(4);
outtextxy(420,145,std.gp);
setcolor(9);
outtextxy(325,180,"El_Subjts:");
setcolor(4);
if(strcmp(std.es,"g1")==0)
outtextxy(425,180,"pre-eng");
else if(strcmp(std.es,"g2")==0)
outtextxy(425,180,"pre-med");
else if(strcmp(std.es,"g3")==0)
outtextxy(425,180,"math,stat,eco/phy.");
else if(strcmp(std.es,"g4")==0)
outtextxy(425,180,"eco,h.eco,soci.");
else if(strcmp(std.es,"g5")==0)
outtextxy(425,180,"edu,soci,hist.");
else if(strcmp(std.es,"g6")==0)
outtextxy(425,180,"psy,islm,eng/urdu.");
else if(strcmp(std.es,"g7")==0)
outtextxy(425,180,"h.eco,islm,civ.");
else if(strcmp(std.es,"g8")==0)
outtextxy(425,180,"hist,islm,P.E.");
else if(strcmp(std.es,"g9")==0)
outtextxy(425,180,"mathG,stat,eco.");
else if(strcmp(std.es,"g10")==0)
outtextxy(425,180,"stat,eco,islm.");
else if(strcmp(std.es,"g11")==0)
outtextxy(425,180,"h.eco,soci,islm.");
else if(strcmp(std.es,"g12")==0)
outtextxy(425,180,"edu,p.sc,islm/eng.");
```

```
    else if(strcmp(std.es,"g13")==0)
    outtextxy(425,180,"edu,islm,eng/urdu.");
    else if(strcmp(std.es,"g14")==0)
    outtextxy(425,180,"hist,soci,eng/urdu.");
    else if(strcmp(std.es,"g15")==0)
    outtextxy(425,180,"edu,islm,eng/urdu.");
    else if(strcmp(std.es,"g16")==0)
    outtextxy(425,180,"h.eco,p.sc,islm.");
    setcolor(9);
    outtextxy(325,210,"Acadamic records");
    outtextxy(325,215,"----------------");
    outtextxy(325,240,"Year     :");
    setcolor(4);
    itoa(std.year,st,10);
    outtextxy(420,240,st);
    setcolor(9);
    outtextxy(325,265,"Class    :");
    setcolor(4);
    outtextxy(420,265,std.clas);
    setcolor(9);
    outtextxy(325,295,"Marks Obt:");
    setcolor(4);
    itoa(std.mkobt,st,10);
    outtextxy(420,295,st);
    setcolor(9);
    outtextxy(325,320,"Total Mks:");
    setcolor(4);
    itoa(std.tmks,st,10);
    outtextxy(420,320,st);
    setcolor(9);
    outtextxy(325,345,"Board    :");
    setcolor(4);
    outtextxy(420,345,std.bord);
    setcolor(9);
    line(250,440,350,440);
    setcolor(1);
    outtextxy(260,447,"Principal");
    getch();
    }
   else
   outtextxy(390,145,"This record not exist");
    }
    goto star;
case 'd':
    break;
    default:outtextxy(210,145,"Enter correct choice");
    getch();
    }
    fclose(fp);
    }
    }
//++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
```

```
void box1()
{cleardevice();
 setfillstyle(1,3);
 bar(0,0,640,480);
 drawlions();
 setcolor(1);
 setfillstyle(1,15);
 rectangle(74,74,581,381);
 bar(75,75,580,380);
 }
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
void box_h()
{cleardevice();
 setfillstyle(1,3);
 bar(0,0,640,480);
 drawlions();
 setcolor(1);
 setfillstyle(1,15);
 rectangle(20,50,620,450);
 bar(21,51,619,449);
 }
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
void menue ()
{// setgraphmode(getgraphmode());
  cleardevice();
  setcolor(4);
  rectangle(2,30,638,478);
  setfillstyle(1,3);
  floodfill(230,230,4);
  setcolor(4);
  rectangle(2,0,638,30);
  setfillstyle(1,7);
  floodfill(7,10,4);
  setcolor(14);
  settextstyle(0,0,1);
  outtextxy( 215,15,"STUDENT'S ADMISSION SYSTEM" );
  setcolor(0);
  draw1(7,610,5,630,25,7,0,15);//exit,minimise,maximise,buttons
  outtextxy(616,12,"X");
  draw1(7,584,5,604,25,7,0,15);
  outtextxy(590,12,"_");
  line(590,20,597,20);
  draw1(7,558,5,578,25,7,0,15);
  rectangle(562,9,573,20);
  line(563,10,573,10);
  draw1(7,180,130,415,170,7,0,15);//creates buttons
  draw1(7,180,200,415,240,7,0,15);
  draw1(7,180,270,415,310,7,0,15);
  draw1(7,180,340,415,380,7,0,15);
  draw1(7,490,80,560,110,7,0,15);
  draw1(7,490,130,560,160,7,0,15);
  settextstyle(1,0,2);
```

```
 outtextxy(496,85,"Help ?");
 outtextxy(496,135,"Print");
 settextstyle(0,0,1);
 outtextxy(198,145,"  Create New Data sheet");
 outtextxy(183,214," Open an existing Data sheet");
 outtextxy(220,285,"Show Single Records");
 outtextxy(210,355,"Make changes in record ");
 show();
 }
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
void menue1 ()
{// setgraphmode(getgraphmode());
 cleardevice();
 setcolor(4);
 rectangle(2,30,638,478);
 setfillstyle(1,3);
 floodfill(230,230,4);
 setcolor(4);
 rectangle(2,0,638,30);
 setfillstyle(1,7);
 floodfill(7,10,4);
 setcolor(10);
 settextstyle(4,0,4);
 outtextxy( 200,50,"W E L C O M E");
 draw1(7,610,5,630,25,7,0,15);
 settextstyle(0,0,1);
 outtextxy(550,12,"(close)");
 outtextxy(616,12,"X");
 draw1(7,100,100,540,400,7,1,15);
 settextstyle(1,0,4);
 outtextxy(200,120,"    W.S.S.O");
 outtextxy(120,170,"MASHAL DEGREE COLLEGE ");
 outtextxy(200,220,"  WAH CANTT");
 setcolor(4);
 settextstyle(1,0,4);
 outtextxy(120,330,"  STUDENTS DATA BANK");
 settextstyle(0,0,1);
 outtextxy(220,380,"    (click to open)");
 show();
 }
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
void sheet()
 {
 setgraphmode(getgraphmode());
 int i,j;
 box();
sta:
  if((fp=fopen(fn,"rb"))==NULL)
   {outtextxy(245,295,"This file does't exist");getch();}
else
  { cleardevice();
    setfillstyle(1,3);
```

```
    bar(1,1,639,479);
    setcolor(15);
    settextstyle(1,0,4);
    outtextxy(95,20," Collective Records Sheet");
    help2();boxa();
switch(chs)
 {
 case 1:
 cleardevice();
 setfillstyle(1,15);
 bar(1,1,639,479);
 setcolor(0);
 settextstyle(0,0,1);
 outtextxy(150,5,"   WSSO MASHAL Degree College For Women   ");
 outtextxy(250,20,"   Wah Cantt.");
 outtextxy(160,35,"    Data Sheet for the students.  ");
 settextstyle(2,0,5);
 setcolor(4);
 outtextxy(4,50,"Reg,no   Name          Father Name     D_o_b   F.occp     Address      "
 i=7,j=70;
 while (fread(&std,sizeof(std),1,fp)==1)
   {
   setcolor(0);
   outtextxy(i-3,j,std.regno);
   outtextxy(i+45,j,std.name);
   outtextxy(i+190,j,std.fname);
   outtextxy(i+335,j,std.dob);
   outtextxy(i+405,j,std.foccp);
   outtextxy(i+470,j,std.add);
   j+=20;
  }
   setcolor(4);
   table1();
   getch();goto sta;
case 2:
   boxf();
   cleardevice();
   setfillstyle(1,15);
   bar(1,1,639,479);
   setcolor(0);
   settextstyle(0,0,1);
   outtextxy(150,5,"  WSSO MASHAL Degree College For Women   ");
   outtextxy(250,20,"  Wah Cantt.");
   outtextxy(160,35,"    Previous Class Results   ");
   settextstyle(2,0,5);
   setcolor(4);
   outtextxy(4,50,"Reg,no   Name          FatherName      class    Year   Mks.obt  Total m
   i=7,j=70;
 while (fread(&std,sizeof(std),1,fp)==1)
  {
  if(strcmp(std.clas,pc)==0)
    {
```

```
    setcolor(0);
     outtextxy(i-3,j,std.regno);
     outtextxy(i+45,j,std.name);
     outtextxy(i+195,j,std.fname);
     outtextxy(i+360,j,std.clas);
     itoa(std.year,st,10);
     outtextxy(i+425,j,st);
     itoa(std.mkobt,st,10);
     outtextxy(i+500,j,st);
     itoa(std.tmks,st,10);
     outtextxy(i+570,j,st);
      j+=20;
      }
      }
     setcolor(4);
     table2();
     getch();goto sta;
case 3:
    boxc();
    cleardevice();
    setfillstyle(1,15);
    bar(1,1,639,479);
    setcolor(0);
    settextstyle(0,0,1);
    outtextxy(150,5,"  WSSO MASHAL Degree College For Women    ");
    outtextxy(250,20,"  Wah Cantt.");
    outtextxy(160,35,"    Previous results (class wise).  ");
    settextstyle(2,0,5);
    setcolor(4);
    outtextxy(4,50,"Reg,no    Name          Father Name      class_ad  Year  Class  Mks.obt
    i=7,j=70;
while(fread(&std,sizeof(std),1,fp)==1)
   {
   if(strcmp(std.cl_ad,ca)==0)
   {
    setcolor(0);
     outtextxy(i-3,j,std.regno);
     outtextxy(i+45,j,std.name);
     outtextxy(i+195,j,std.fname);
     outtextxy(i+360,j,std.cl_ad);
     itoa(std.year,st,10);
     outtextxy(i+420,j,st);
     outtextxy(i+480,j,std.clas);
     itoa(std.mkobt,st,10);
     outtextxy(i+535,j,st);
     itoa(std.tmks,st,10);
     outtextxy(i+590,j,st);
     j+=20;}
     }
     setcolor(4);
     table3();
     getch();goto sta;
```

```
case 4:boxc();
    cleardevice();
    setfillstyle(1,15);
    bar(1,1,639,479);
    setcolor(0);
    settextstyle(0,0,1);
    outtextxy(150,5,"  WSSO MASHAL Degree College For Women    ");
    outtextxy(250,20,"  Wah Cantt.");
    outtextxy(160,35,"    Elective Subjects (class wise).  ");
    settextstyle(2,0,5);
    setcolor(4);
    outtextxy(4,50,"Reg,no    Name          Father Name       class_ad Mks.obt   El_subjects
     i=7,j=70;
   while (fread(&std,sizeof(std),1,fp)==1)
   {
   if(strcmp(std.cl_ad,ca)==0)
   {
   setcolor(0);
   outtextxy(i-3,j,std.regno);
   outtextxy(i+45,j,std.name);
   outtextxy(i+193,j,std.fname);
   outtextxy(i+355,j,std.cl_ad);
   itoa(std.mkobt,st,10);
   outtextxy(i+425,j,st);
    if(strcmp(std.es,"g1")==0)
    outtextxy(i+490,j,"pre_eng");
    else if(strcmp(std.es,"g2")==0)
    outtextxy(i+490,j,"pre-med");
    else if(strcmp(std.es,"g3")==0)
    outtextxy(i+490,j,"math,stat,eco/phy.");
    else if(strcmp(std.es,"g4")==0)
    outtextxy(i+490,j,"eco,h.eco,soci.");
    else if(strcmp(std.es,"g5")==0)
    outtextxy(i+490,j,"edu,soci,hist.");
    else if(strcmp(std.es,"g6")==0)
    outtextxy(i+490,j,"psy,islm,eng/urdu.");
    else if(strcmp(std.es,"g7")==0)
    outtextxy(i+490,j,"h.eco,islm,civ.");
    else if(strcmp(std.es,"g8")==0)
    outtextxy(i+490,j,"hist,islm,P.E.");
    else if(strcmp(std.es,"g9")==0)
    outtextxy(i+490,j,"mathG,stat,eco.");
    else if(strcmp(std.es,"g10")==0)
    outtextxy(i+490,j,"stat,eco,islm.");
    else if(strcmp(std.es,"g11")==0)
    outtextxy(i+490,j,"h.eco,soci,islm.");
    else if(strcmp(std.es,"g12")==0)
    outtextxy(i+490,j,"edu,p.sc,islm/eng.");
    else if(strcmp(std.es,"g13")==0)
    outtextxy(i+490,j,"edu,islm,eng/urdu.");
    else if(strcmp(std.es,"g14")==0)
    outtextxy(i+490,j,"hist,soci,eng/urdu.");
```

```
    else if(strcmp(std.es,"g15")==0)
    outtextxy(i+490,j,"edu,islm,eng/urdu.");
    else if(strcmp(std.es,"g16")==0)
    outtextxy(i+490,j,"h.eco,p.sc,islm.");
     j+=20;}
     }
     setcolor(4);
     table4();getch();goto sta;
case 5:boxc();
    cleardevice();
    setfillstyle(1,15);
    bar(1,1,639,479);
    setcolor(0);
    settextstyle(0,0,1);
    outtextxy(150,5,"  WSSO MASHAL Degree College For Women    ");
    outtextxy(250,20,"  Wah Cantt.");
    outtextxy(160,35,"    Students vs Father occupations .  ");
    settextstyle(2,0,5);
    setcolor(4);
    outtextxy(4,50,"Reg,no    Name          Father Name     class_ad Mks.obt T.mks   Fathe
    i=7,j=70;
    while (fread(&std,sizeof(std),1,fp)==1)
    {
    if(strcmp(std.cl_ad,ca)==0)
    {
    setcolor(0);
    outtextxy(i-3,j,std.regno);
    outtextxy(i+45,j,std.name);
    outtextxy(i+195,j,std.fname);
    outtextxy(i+355,j,std.cl_ad);
    itoa(std.mkobt,st,10);
    outtextxy(i+417,j,st);
    itoa(std.tmks,st,10);
    outtextxy(i+480,j,st);
    outtextxy(i+533,j,std.foccp);
    j+=20;}
    }
    setcolor(4);
    table5();
    getch();
    goto sta;
case 6:
    boxc();
    cleardevice();
    setfillstyle(1,15);
    bar(1,1,639,479);
    setcolor(0);
    settextstyle(0,0,1);
    outtextxy(150,5,"  WSSO MASHAL Degree College For Women    ");
    outtextxy(250,20,"  Wah Cantt.");
    outtextxy(160,35,"    Students vs Elective subjects .  ");
    settextstyle(2,0,5);
```

```
setcolor(4);
outtextxy(4,50,"Reg,no   Name          Father Name      class_ad  Group   Elective Subj
i=7,j=70;
while (fread(&std,sizeof(std),1,fp)==1)
{
if(strcmp(std.cl_ad,ca)==0)
{
setcolor(0);
outtextxy(i-3,j,std.regno);
outtextxy(i+45,j,std.name);
outtextxy(i+193,j,std.fname);
outtextxy(i+355,j,std.cl_ad);
outtextxy(i+415,j,std.gp);
if(strcmp(std.es,"g1")==0)
outtextxy(i+490,j,"pre_eng");
else if(strcmp(std.es,"g2")==0)
outtextxy(i+490,j,"pre-med");
else if(strcmp(std.es,"g3")==0)
outtextxy(i+490,j,"math,stat,eco/phy.");
else if(strcmp(std.es,"g4")==0)
outtextxy(i+490,j,"eco,h.eco,soci.");
else if(strcmp(std.es,"g5")==0)
outtextxy(i+490,j,"edu,soci,hist.");
else if(strcmp(std.es,"g6")==0)
outtextxy(i+490,j,"psy,islm,eng/urdu.");
else if(strcmp(std.es,"g7")==0)
outtextxy(i+490,j,"h.eco,islm,civ.");
else if(strcmp(std.es,"g8")==0)
outtextxy(i+490,j,"hist,islm,P.E.");
else if(strcmp(std.es,"g9")==0)
outtextxy(i+490,j,"mathG,stat,eco.");
else if(strcmp(std.es,"g10")==0)
outtextxy(i+490,j,"stat,eco,islm.");
else if(strcmp(std.es,"g11")==0)
outtextxy(i+490,j,"h.eco,soci,islm.");
else if(strcmp(std.es,"g12")==0)
outtextxy(i+490,j,"edu,p.sc,islm/eng.");
else if(strcmp(std.es,"g13")==0)
outtextxy(i+490,j,"edu,islm,eng/urdu.");
else if(strcmp(std.es,"g14")==0)
outtextxy(i+490,j,"hist,soci,eng/urdu.");
else if(strcmp(std.es,"g15")==0)
outtextxy(i+490,j,"edu,islm,eng/urdu.");
else if(strcmp(std.es,"g16")==0)
outtextxy(i+490,j,"h.eco,p.sc,islm.");
            j+=20;
            }
            }
          setcolor(4);
          table6(); getch();goto sta;
case 7:
   boxc();
```

```
    cleardevice();
    setfillstyle(1,15);
    bar(1,1,639,479);
    setcolor(0);
    settextstyle(0,0,1);
    outtextxy(150,5,"  WSSO MASHAL Degree College For Women    ");
    outtextxy(250,20,"  Wah Cantt.");
    outtextxy(160,35,"   Group of studies vs Marks obtained.  ");
    settextstyle(2,0,5);
    setcolor(4);
    outtextxy(4,50,"Reg,no    Name          Father Name       class_ad  Group    Mks.obt  T.
     i=7,j=70;
    while (fread(&std,sizeof(std),1,fp)==1)
    {
    if(strcmp(std.cl_ad,ca)==0)
    {
     setcolor(0);
     outtextxy(i-3,j,std.regno);
     outtextxy(i+45,j,std.name);
     outtextxy(i+193,j,std.fname);
     outtextxy(i+355,j,std.cl_ad);
     outtextxy(i+415,j,std.gp);
     itoa(std.mkobt,st,10);
     outtextxy(i+495,j,st);
     itoa(std.tmks,st,10);
     outtextxy(i+565,j,st);
     j+=20;}
     }
     setcolor(4);
     table7();getch();goto sta;
case 8:
     break;
              }
      }
     fclose(fp);
   }
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
void table1()
 {
  int x=50,y=70;
  for(int i=0;i<21;i++)
  {
   rectangle(1,x,50,y);
    rectangle(50,x,195,y);
    rectangle(195,x,340,y);
    rectangle(340,x,410,y);
    rectangle(410,x,475,y);
    rectangle(475,x,639,y);
    x+=20; y+=20;
    }
   }
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
```

```
void table2()
 {
  int x=50,y=70;
  for(int i=0;i<21;i++)
  {
   rectangle(1,x,50,y);
    rectangle(50,x,200,y);
    rectangle(200,x,350,y);
    rectangle(350,x,420,y);
    rectangle(420,x,490,y);
    rectangle(490,x,560,y);
    rectangle(560,x,639,y);
    x+=20; y+=20;
     }
   }
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
void table3()
 {
  int x=50,y=70;
  for(int i=0;i<21;i++)
  {
   rectangle(1,x,50,y);
    rectangle(50,x,200,y);
    rectangle(200,x,350,y);
    rectangle(350,x,410,y);
    rectangle(410,x,470,y);
    rectangle(470,x,525,y);
    rectangle(525,x,585,y);
    rectangle(585,x,639,y);
    x+=20; y+=20;
     }
   }
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
void table4()
 {
  int x=50,y=70;
  for(int i=0;i<21;i++)
  {
   rectangle(1,x,50,y);
    rectangle(50,x,200,y);
    rectangle(200,x,350,y);
    rectangle(350,x,420,y);
    rectangle(420,x,490,y);
    rectangle(490,x,639,y);
    x+=20; y+=20;
     }
   }
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
void table5()
 {
  int x=50,y=70;
  for(int i=0;i<21;i++)
```

```
  {
    rectangle(1,x,50,y);
    rectangle(50,x,200,y);
    rectangle(200,x,350,y);
    rectangle(350,x,410,y);
    rectangle(410,x,470,y);
    rectangle(470,x,530,y);
    rectangle(530,x,639,y);
    x+=20; y+=20;
     }
   }
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
void table6()
 {
  int x=50,y=70;
  for(int i=0;i<21;i++)
  {
    rectangle(1,x,50,y);
    rectangle(50,x,200,y);
    rectangle(200,x,350,y);
    rectangle(350,x,420,y);
    rectangle(420,x,490,y);
  //  rectangle(470,x,530,y);
    rectangle(490,x,639,y);
    x+=20; y+=20;
     }
   }
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
void table7()
 {
  int x=50,y=70;
  for(int i=0;i<21;i++)
  {
   rectangle(1,x,50,y);
    rectangle(50,x,200,y);
    rectangle(200,x,350,y);
    rectangle(350,x,420,y);
    rectangle(420,x,490,y);
    rectangle(490,x,560,y);
    rectangle(560,x,639,y);
    x+=20; y+=20;
     }
   }
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
void chang()
{
  char ch;
  setgraphmode(getgraphmode());
  box1();
  settextstyle(1,0,3);
  outtextxy(220,40,"  Make Changes");
  settextstyle(0,0,1);
```

```
 outtextxy(120,120,"1.Copy file");
 outtextxy(120,150,"2.Rename file");
 outtextxy(120,180,"3.Delete file");
 outtextxy(120,210,"4.Update any record");
 outtextxy(120,240,"5.Delete a record from file");
 outtextxy(120,270,"6.Change password");
 outtextxy(120,300,"7.Exit");
 settextstyle(1,0,3);
 outtextxy(200,380,"Enter your choice");
 ch=getch();
 switch(ch)
 {
 case '1':
   copy_f();
    break;
 case'2':
  ren_f();
    break;
 case '3':
  erase_f();
    break;
 case '4':
  update_r();
    break;
 case'5':
    del_rec();
    break;
 case '6':
    chang_psw();
    break;
 case '7':
    break;
 default : outtextxy(240,320,"Enter correct choice ");
  }
 }
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
void copy_f()
{
 box1(); settextstyle(1,0,2);
 outtextxy(265,40,"Copy file");
 settextstyle(0,0,1);
 outtextxy(110,190,"Enter Sourse file name");
 draw1(0,110,215,290,245,0,15,15);
 gotoxy(20,15);
 gets(fname);
 fn=strcat(fname,ext);
 setcolor(1);
 outtextxy(380,190,"Enter New file name");
 draw1(0,370,215,550,245,0,15,15);
 gotoxy(52,15);
 gets(ftname);
 ftn=strcat(ftname,ext);
```

```
 fp=fopen(fn,"rb+");
 ftp=fopen(ftn,"wb") ;
 rewind(fp);
 while(fread(&std,sizeof(std),1,fp)==1)
 {
 fwrite(&std,sizeof(std),1,ftp);
 }
 fclose(fp);
 fclose(ftp);
 delay(1000);
 setcolor(4);
 outtextxy(240,290,"File is sucessfully copied");
 outtextxy(240,310,"     (press any key)");
 getch();
}
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
void sav_as()
{
 char ch1;
 setgraphmode(getgraphmode());
 box1();
 settextstyle(1,0,3);
 outtextxy(220,40,"  Save As File");
 settextstyle(0,0,1);
 outtextxy(120,120,"1.Copy file");
 outtextxy(120,150,"2.Rename file");
 outtextxy(120,180,"3.Exit");
 settextstyle(1,0,3);
 outtextxy(200,380,"Enter your choice");
 ch1=getch();
 switch(ch1)
 {
 case '1':
 copy_f();sav_as();
 case'2':
 ren_f();sav_as();
 case '3':break;
 }
}
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
void ren_f()
{
 box1();settextstyle(1,0,2);
 outtextxy(255,40,"Rename file");
 settextstyle(0,0,1);
 outtextxy(117,190,"Enter Old file name");
 draw1(0,110,215,290,245,0,15,15);
 gotoxy(20,15);
 gets(fname);
 fn=strcat(fname,ext);
 setcolor(1);
 outtextxy(380,190,"Enter New file name");
```

```
 draw1(0,370,215,550,245,0,15,15);
 gotoxy(52,15);
 gets(ftname);
 ftn=strcat(ftname,ext);
 fp=fopen(fn,"rb+");
 ftp=fopen(ftn,"wb") ;
 rewind(fp);
 while(fread(&std,sizeof(std),1,fp)==1)
 {
 fwrite(&std,sizeof(std),1,ftp);
 }
 fclose(fp);
 fclose(ftp);
 delay(1000);
 setcolor(4);
 outtextxy(240,290,"File name is changed");
 outtextxy(240,310,"  (press any key)   ");
 getch();
}
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
void update_r()
{
 char c;
 long int recsize;
 setgraphmode(getgraphmode());
 box1();settextstyle(1,0,2);
 outtextxy(190,40,"Update any record from file");
 settextstyle(0,0,1);
 outtextxy(125,190," Enter  file name");
 draw1(0,110,215,290,245,0,4,4);
 gotoxy(20,15);
 gets(fname);
 fn=strcat(fname,ext);
 if((fp=fopen(fn,"rb+"))==NULL)
 {outtextxy(110,270,"This file does't exist");
  outtextxy(130,300,"(press any key)");
  getch();
  }
else
 {  recsize=sizeof(std);
 setcolor(1);
 outtextxy(340,190,"     Enter Registration No");
 draw1(0,370,215,550,245,0,15,15);
 gotoxy(52,15);
 gets(recno);
 /* if(strcmp(recno,std.regno)!=0)
 { setcolor(4);
   outtextxy(380,280,"This record not exist");
   outtextxy(410,300,"(press any key)");
   getch();
   }*/
 rewind(fp);
```

```
while(fread(&std,recsize,1,fp)==1)
{
if(strcmp(recno,std.regno)==0)
{
cleardevice();
settextstyle(1,0,1);
setfillstyle(1,11);
bar(1,1,639,479);
setcolor(0);
rectangle(0,0,640,480);
rectangle(4,4,636,76);
rectangle(4,79,211,401);
rectangle(425,79,640,401);
rectangle(4,404,636,476);
line(5,170,210,170);
drawlions();
setfillstyle(1,5);
bar(5,5,635,75);
bar(5,405,635,475);
setfillstyle(1,7);
bar(7,80,320,400);
box2();
setfillstyle(1,7);
bar(321,80,631,400);
box3();
setcolor(1);
rectangle(6,79,632,401);
draw1(7,140,420,200,445,7,0,15);
setcolor(4);
outtextxy(148,422,"S");
setcolor(0);
outtextxy(158,422,"ave");
draw1(7,260,420,320,445,7,0,15);
setcolor(4);
outtextxy(262,422,"C");
setcolor(0);
outtextxy(274,422,"ancel");
draw1(7,380,420,440,445,7,0,15);
setcolor(4);
outtextxy(386,422,"N");
setcolor(0);
outtextxy(398,422,"ext?");
draw1(7,500,420,560,445,7,0,15);
setcolor(4);
outtextxy(502,422,"F");
setcolor(0);
outtextxy(514,422,"inish");
settextstyle(1,0,4);
setcolor(7);
outtextxy(110,30,"Student's Data Updation Form");
setcolor(9);
settextstyle(1,0,1);
```

```
outtextxy(9,88,"Reg_N0 ");
outtextxy(9,122,"Name ");
outtextxy(9,168,"F_ Name ");
outtextxy(9,213,"D_o_Birth ");
outtextxy(9,248,"Religion ");
outtextxy(9,285,"Fath_Occp ");
outtextxy(9,325,"Tele # ");
outtextxy(9,365,"Home Add ");
outtextxy(330,88,"Class_Ad ");
outtextxy(330,122,"Group ");
outtextxy(330,168,"El_subjs ");
settextstyle(0,0,1);
outtextxy(326,198,"Enter previous class Results:");
settextstyle(1,0,1);
outtextxy(335,213,"Year ");
outtextxy(335,248,"Class ");
outtextxy(330,285,"Mks_obt ");
outtextxy(330,325,"T.Mks ");
outtextxy(330,365,"Board ");
gotoxy(18,7);
puts(std.regno);
gotoxy(18,9);
puts(std.name);
gotoxy(18,12);
puts(std.fname);
gotoxy(18,15);
puts(std.dob);
gotoxy(18,17);
puts(std.relig);
gotoxy(18,19);
puts(std.foccp);
gotoxy(18,22);
puts(std.phno);
gotoxy(17,24);
puts(std.add);
gotoxy(57,7);
puts(std.cl_ad);
gotoxy(57,9);
puts(std.gp);
gotoxy(57,12);
puts(std.es);
itoa(std.year,st,10);
gotoxy(57,15);
puts(st);
gotoxy(57,17);
puts(std.clas);
itoa(std.mkobt,st,10);
gotoxy(57,19);
puts(st);
itoa(std.tmks,st,10);
gotoxy(57,22);
puts(st);
```

```
  gotoxy(57,24);
  puts(std.bord);
/*-------------------*/
  gotoxy(18,7);       //enter new data for updation.
  gets(std.regno);
//  std.regno==s.regno;
  gotoxy(18,9);
  gets(std.name);
//  std.name==s.name;
  gotoxy(18,12);
  gets(std.fname);
//  std.fname==s.fname;
  gotoxy(18,15);
  gets(std.dob);
//  std.dob==s.dob;
  gotoxy(18,17);
  gets(std.relig);
//  std.relig==s.relig;
  gotoxy(18,19);
  gets(std.foccp);
//  std.foccp==s.foccp;
  gotoxy(18,22);
  gets(std.phno);
//  std.phno==s.phno;
  gotoxy(17,24);
  gets(std.add);
//  std.add==s.add;
  gotoxy(57,7);
  gets(std.cl_ad);
//  std.cl_ad==s.cl_ad;
  gotoxy(57,9);
  gets(std.gp);
//  std.gp==s.gp;
  gotoxy(57,12);
  gets(std.es);
//  std.es==s.es;
  gotoxy(57,15);
  gets(st);
  std.year=atoi(st);
//  std.year==s.year;
  gotoxy(57,17);
  gets(std.clas);
//  std.clas==s.clas;
  gotoxy(57,19);
  gets(st);
  std.mkobt= atoi(st);
//  std.mkobt==s.mkobt;
  gotoxy(57,22);
  gets(st);
  std.tmks=atoi(st);
//  std.tmks==s.tmks;
  gotoxy(57,24);
```

```
  gets(std.bord);
// std.bord==s.bord;
  fseek(fp,-recsize,SEEK_CUR);
c=getch();
  if(c=='s'||c=='S')
  {
  fwrite(&std,recsize,1,fp);
  draw1(7,140,420,200,445,7,15,0);
  setcolor(4);
  outtextxy(148,422,"Save");
  delay(500);
  draw1(7,140,420,200,445,7,0,15);
  setcolor(4);
  outtextxy(148,422,"S");
  setcolor(0);
  outtextxy(158,422,"ave");
  fclose(fp);
  }
    if (c=='c'||c=='C')
     { draw1(7,260,420,320,445,7,15,0);
     setcolor(2);
     outtextxy(262,422,"C");
     setcolor(2);
     outtextxy(274,422,"ancel");
     delay(500);
     }
c=getch();
     if ( c=='n'||c=='N' )
     { draw1(7,380,420,440,445,7,15,0);
     setcolor(1);
     outtextxy(386,422,"N");
     setcolor(1);
     outtextxy(398,422,"ext");
     draw1(7,500,420,560,445,7,0,15);
     delay(600);
     update_r();
     }
  if ( c=='f'||c=='F')
  {
  draw1(7,500,420,560,445,7,15,0);
  setcolor(4);
  outtextxy(148,422,"Finish");
  delay(500);
  draw1(7,500,420,560,445,7,15,0);
  setcolor(4);
  outtextxy(502,422,"F");
  setcolor(0);
  outtextxy(514,422,"inish");
  draw1(7,500,420,560,445,7,0,15);
  delay(500);
  }
// fclose(fp);
```

```
 }
   }
  }
 }
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
void del_rec()
{
aa:char c1;
 long int recsize;
 setgraphmode(getgraphmode());
 box1();settextstyle(1,0,2);
 outtextxy(190,40,"Delte any record from file");
 settextstyle(0,0,1);
 outtextxy(125,190," Enter  file name");
 draw1(0,110,215,290,245,0,4,4);
 gotoxy(20,15);
 gets(fname);
 fn=strcat(fname,ext);
 if((fp=fopen(fn,"rb"))==NULL)
 {outtextxy(110,270,"This file does't exist");
  outtextxy(130,300,"(press any key)");
  getch();
 }
else
 {
 outtextxy(105,300,"Enter a temp. file name");
 draw1(0,110,315,290,345,0,4,4);
 gotoxy(20,21);
 gets(ftname);
 ftn=strcat(ftname,ext);
 recsize=sizeof(std);
 setcolor(1);
 outtextxy(350,190,"Enter Reg.No to del record");
 draw1(0,370,215,550,245,0,15,15);
 gotoxy(52,15);
 gets(recno);
 ftp=fopen(ftn,"wb");
 rewind(fp);
 while(fread(&std,recsize,1,fp)==1)
 {
 if(strcmp(recno,std.regno)!=0)
  fwrite(&std,recsize,1,ftp);
 }
 fclose(fp);
 fclose(ftp);
 remove(fn);
 rename(ftn,fn);
 fp=fopen(fn,"rb+");
 setcolor(1);
 outtextxy(320,300,"record is deleted.");
 outtextxy(320,320,"But your source file exists.");
 outtextxy(320,340,"Any More to Delete? [ y / n]:");
```

```
 c1=getch();
 if(c1=='y'||c1=='Y')
 goto aa;
 }
 }
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
void erase_f()
{
 setgraphmode(getgraphmode());
 box1(); settextstyle(1,0,2);
 outtextxy(255,40,"Delete file");
 settextstyle(0,0,1);
 outtextxy(115,190,"Enter  file name");
 draw1(0,110,215,290,245,0,15,15);
 gotoxy(20,15);
 gets(fname);
 fn=strcat(fname,ext);
 setcolor(4);
 delay(1000);
 outtextxy(240,290,"This  file is deleted");
 outtextxy(240,310,"   (press any key)   ");
 remove(fn);
 getch();
}
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
void help()
{setgraphmode(getgraphmode());
  box_h();
  settextstyle(1,0,4);
  outtextxy(285,15,"HELP");
  settextstyle(0,0,1);
  setcolor(4);
  outtextxy(120,60,"How to enter data in the data entry form: ");
  outtextxy(70,90,"1. Religion         :  muslim ,  non-muslim ");
  outtextxy(70,110,"2. Father occupation :  pof    ,   non-pof");
  outtextxy(70,130,"3. Class of admission:  xi     ,   xiii");
  outtextxy(70,150,"4. Group           :  sc.    ,   arts");
  outtextxy(70,170,"5. Previous Class   :  ssc    ,   hssc");
  outtextxy(70,190,"6. Elective subjects :  Enter following codes ");
  outtextxy(70,210,"g1.  pre-eng.              g2.  pre-med.");
  outtextxy(70,230,"g3.  math,stat,eco/phy      g4.  eco,h.eco,soci");
  outtextxy(70,250,"g5.  edu,soci,hist/civ      g6.  psy/edu,islm,eng/urdu ");
  outtextxy(70,270,"g7.  h.eco,islm,civ/psy.    g8.  hist/soci,islm,P.E. ");
  outtextxy(70,290,"                For BA/B.Sc:");
  outtextxy(70,310,"g9.  math,stat,eco.         g10. stat,eco,islm.");
  outtextxy(70,330,"g11. h.eco,soci,islm/eng/urdu  g12. edu,p.sc,eng/urdu/islm.");
  outtextxy(70,350,"g13. islm,edu,eng/urdu      g14. hist,soci,islm");
  outtextxy(70,370,"g15. edu,islm,eng/urdu.     g16. h.eco,p.sc,eng/urdu/islm.");
  getch();
  }
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
void about()
```

```
 {
  setgraphmode(getgraphmode());
  box1 ();
  setcolor(1);
  settextstyle(1,0,4);
  outtextxy(285,20,"About");
  settextstyle(1,0,2);
  outtextxy(160,100,"Admission System  ");
  outtextxy(160,125,"Version 1.0 ");
  outtextxy(160,145,"Copyright (C) July,2003 ");
  setcolor(4); settextstyle(2,0,6); line(155,175,420,175);
  outtextxy(160,260,"Product ID: AF254-TR985-QWE320ZP");
  outtextxy(160,280,"This Product is Licensed to ");
  outtextxy(160,300,"Safeer Akhtar & Muhammad Shakeel ");
  outtextxy(160,320,"Q.A.U Islamabad ");
  getch();
 }
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
void print()
 { box();
  if((fp=fopen(fn,"rb"))==NULL)
  {outtextxy(33,95,"This file not exist");getch();}
  if((ftp=fopen("PRN","w"))==NULL);
  {outtextxy(100,350,"Can't Access Printer (or) No Printer is Installed.");
   getch();
   }
  while (fread(&std,sizeof(std),1,fp)==1)
   {
   fputs(fn, ftp);
   }
  }
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
void boxa()
 {
  setcolor(0);
   draw1(0,205,110,385,210,7,0,5);
   outtextxy(240,130,"Enter  choice");
   draw1(0,240,155,340,175,0,15,15);
   drawlions();
   gotoxy(35,11);
   cin>>chs;
  }
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
void boxaa()
 {
   setcolor(0);
   draw1(0,195,63,370,163,7,0,5);
   outtextxy(210,80," Enter  choice");
   draw1(0,225,110,330,130,0,15,15);
   drawlions();
   gotoxy(35,8);
   cin>>chs3;
```

```
 }
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
void boxa1()
 {
  setcolor(0);
  draw1(0,205,63,380,163,7,0,5);
  outtextxy(223,85,"  Enter Choice");
  draw1(0,234,109,349,129,0,15,15);
  drawlions();
  gotoxy(33,8);
  cin>>chs2;
 }
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
void boxa2()
 {
  setcolor(0);
   draw1(0,205,63,380,163,7,0,5);
   outtextxy(223,85,"  Enter Choice");
   draw1(0,234,109,349,129,0,15,15);
   drawlions();
   gotoxy(33,8);
   cin>>chs1;
   }
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
void boxb1()
{
  setcolor(0);
  draw1(0,385,63,560,163,7,0,5);
  outtextxy(400,85,"  Enter reg_no.");
  draw1(0,415,109,520,129,0,15,15);
  drawlions();
  gotoxy(58,8);
  gets(recno);
 }
//=++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
void boxb2()
{
  setcolor(0);
  draw1(0,385,63,560,163,7,0,5);
  outtextxy(395,85,"Enter student's name");
  draw1(0,395,109,545,129,0,15,15);
  drawlions();
  gotoxy(51,8);
  gets(nam);
 }
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
void boxc()
{
  setcolor(0);
  draw1(0,15,110,190,210,7,0,5);
  outtextxy(20,132," Enter class of ad.");
  draw1(0,35,155,150,175,0,15,15);
```

```
 drawlions();
 gotoxy(8,11);
 gets(ca);//class of admission
 }
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
void boxf()
{
 setcolor(0);
 draw1(0,395,110,570,210,7,0,5);
 outtextxy(400,132,"  Enter prev.class");
 draw1(0,430,155,530,175,0,15,15);
 drawlions();
 gotoxy(58,11);
 gets(pc);
}
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
void help2()
{
 setcolor(1);
 setfillstyle(1,15);
 rectangle(15,220,620,460);
 bar(16,221,619,459);
 settextstyle(0,0,1);
 setcolor(4);
 outtextxy(200,225," Choices to select ");
 outtextxy(20,255,"  Reg no, name,father-name  with:");
 outtextxy(20,275,"     1. d_o_b , father_occpation , address.");
 outtextxy(20,295,"     2. previous class acadamic results. ");
 outtextxy(20,315,"     3. class of admission , mks_obt , total mks.");
 outtextxy(20,335,"     4. class of admission , mks_obt , el_subjects.");
 outtextxy(20,355,"     5. class of admission , mks_obt , father occp.");
 outtextxy(20,375,"     6. class of admission , group   , el_subjects.");
 outtextxy(20,395,"     7. class of admission , group   , mks_obt.");
 outtextxy(20,420,"     8. EXIT");
 }
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
void help3()
{
  setcolor(1);
  setfillstyle(1,15);
  rectangle(100,250,500,400);
  bar(101,251,499,399);
  settextstyle(0,0,1);
  setcolor(4);
  outtextxy(135,275," CHOICES: ");
  outtextxy(135,300,"     a : All records one by one.");
  outtextxy(135,320,"     b : Search a single record by  Reg.No. ");
  outtextxy(135,340,"     c : Search a single record by  Name. ");
  outtextxy(135,360,"     d : EXIT");
  }
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
void sys_login()
```

```
{
 int cnt=1,ptr,count=0;
 char pwd[15],ch;
mm:  cleardevice();
    setfillstyle(1,3);
    bar(0,0,640,480);
    drawlions();
    setcolor(1);
    setfillstyle(1,15);
    draw1(7,80,80,560,420,7,15,15);
    setcolor(10);
    settextstyle(7,0,5);
    outtextxy(105,20,"   SYSTEM LOGIN ");
    setcolor(1);
    settextstyle(1,0,4);
    outtextxy(100,130,"User Name:");
    outtextxy(100,200,"Password  :");
    draw1(0,290,138,490,168,0,15,15);
    draw1(0,290,212,490,242,0,15,15);
    gotoxy(39,10);cout<<"Shakeel & Safeer";
    gotoxy(39,15);strcpy(pwd,NULL);
    do
    { ch=getch();
    if(ch==13)
    break;
    pwd[count++]=ch;
    cout<<"*";
    }
    while(ch!=13);
    pwd[count]='\0';
    ptr=strcmp("fgei",pwd);
    if(ptr==0)
    { //start();
    //title();
    //loading();
    choice();
    }
    else
    {
    cnt++;
    if(cnt>3)
     { settextstyle(1,0,4);
               outtextxy(120,300,"Remember your password.");
               delay(2000);
               exit(0);
     }
   settextstyle(1,0,4);
   outtextxy(120,300,"Password is not correct..");
   delay(2000);
   goto mm;
   }
  }
```

```
//+++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
void chang_psw()
{ setgraphmode(getgraphmode());
  box1();
  fp1=fopen(fn1,"wb");
  settextstyle(1,0,2);
  outtextxy(255,40,"Change Password");
  settextstyle(0,0,1);
  outtextxy(117,190,"Enter User name");
  draw1(0,110,215,290,245,0,15,15);
  gotoxy(20,15);
  gets(f1name);
  fn1=strcat(f1name,ext);
  setcolor(1);
  outtextxy(380,190,"Enter Your Password");
  draw1(0,370,215,550,245,0,15,15);
  gotoxy(52,15);
  gets(p.psw);
  fwrite(&p,sizeof(p),1,fp1);
  fclose(fp1);
  delay(200);
  setcolor(4);
  outtextxy(240,290,"Your password is saved.");
  outtextxy(240,310,"  (press any key)   ");
  getch();
}
/*++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
/++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++++
```