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COMPUTERIZED

INVENTORY CONTROL SYSTEM

FOR

PAKISTAN INSTITUTE OF MEDICAL SCIENCES

ISLAMABAD

BY

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&

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Submitted to

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as requirement for completion of PGD in computer
sciences.

QUAID-I-AZAM UNIVERSITY

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PROJECT BRIEF

- PROJECT TITLE** : Inventory control system for Pakistan
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ABSTRACT

A computer based " Inventory control system for Pakistan institute of Medical Sciences " has been developed using Foxpro data-base.

The purpose of this study is to facilitate data manipulation for Inventory Control system ,as it is difficult to handle huge data manually and to achieve the desired result.

Knowing that the computerization can solve problems occurring manually and more reliable results can be obtained. Data entry can be done effectively and the records can be maintained in a user friendly environment

Through this the desired variety of statements and reports can be obtained within the shorter possible time.

DEDICATED

TO

OUR PARENTS

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CHAPTER NO. 1

DATA BASES

DATA BASE:

A Data Base may be defined as a collection of interrelated data stored with as little redundancy as optimal fashion. The data stored for a data base is accomplished by the use of one or more than one files. A FILE is a collection of similar records kept on secondary storage devices. Typical secondary storage device are disks, Tapes and Drums etc. The major components of the ARCHITECTURE of a data base are shown as follows:

1. APPLICATION PROGRAMS
2. LOGICAL DATA DESIGN
3. PHYSICAL DATA DESIGN

1.1.1 APPLICATION PROGRAMS

An application program is a software routine or a logical file, which fulfills the requirements of the users, using one or more than one files of the data base . The access to the data base is provided by a data language. A data language is a set of instruction that permits access to the data, organized according to the data MODEL. Each user has a language at his disposal. For the application programs it should be a conventional programming language, such as PL/1, COBOL; For a terminal User it is a special purpose language.

1.1.2 LOGICAL DATA DESIGN

Logical data design is a software routine which provides the access strategy by calling the application program, in order to get the physical Data and vice versa. This interconvertor barrier between physical data and application programs is called a DATA MODEL (D). In order to translate a model into an operational system, the model is described in a form which lends itself, for implementation. Such a description of the data model in the operational form is called a SCHEMA. There are currently three favored approaches to form a data model.

1. RELATIONAL APPROACH
2. HIERARCHICAL APPROACH
3. NET WORK APPROACH

1.1.2.1 RELATIONAL APPROACH

The relational data model is a formal model for representing relationships among attributes of an entity set and associations between the entity sets. The relational approach is based on mathematical theory of relations. The result of the relational mathematics can be directly applied to relational data base. The relation is a set of topples. An n-array relation can be represented as a table, each column of the table, called an attribute, corresponding to a domain of the ration. Each row corresponds to an n-topple.

1.1.2.2 HIERARCHICAL APPROACH

In the development of a data model hierarchical concepts play an important role. A model based on the hierarchical concepts can be directly implemented using next oriented file structure. In order to accommodate data that does not fit within single tree, a hierarchical data base system will allow the existence of multiple trees, or a forest. The trees in the forrest can be of different heights or levels. There could also be single level trees.

1.1.2.3 NETWORK APPROACH

The Network Approach is a formal model for representing a relationship between RECORD TYPES AND LINK. Record Types are used to represent the relationships among the attributes of an entity set. LINKS are used to represent the associations between entity sets. A network is a more general structure than the hierarchical one because a given model may have any number of immediate superior as well as any number of immediate subordinates. We are not limited to the maximum of one, as we are in a hierarchical structure.

1.1.3 PHYSICAL DATA BASE DESIGN

Data can be stored on any secondary storage media such as Disks, Drums and Tapes. In physical design emphasis is laid upon the following.

- Appropriate access method with minimum access time.
- No duplication.
- Security checks for physical data from unauthorized access and adments.

1.1.4 ADVANTAGES OF A DATA BASE

The main advantages of a data base system are as follows:

- Reduced Computer processing time.
- Centralized file for all application.
- Reduce sorting of records.
- Reduce number of programs to be written.

CHAPTER NO. 2

WHAT IS

INVENTORY

CONTROL

SYSTEM

2.1 WHAT IS INVENTORY CONTROL

Inventory control is the science based art of ensuring that just enough inventory (stock) is held by an organization to meet economically both its internal and external demand commitments.

The principle reasons for holding stock are:

- a) To act as an insurance against higher than average demand.
- b) To act as an insurance against longer than average supplier delivery time, this usually being termed in inventory control as the "lead time".
- c) To take advantage of quantity discount.
- d) To take advantages of seasonal and other price fluctuations.
- e) To minimize delay in production caused by a lack of parts.

There can be disadvantages in holding either too much or too little inventory, inventory control is primarily concerned with obtaining the correct balance or compromise between these two extremes.

2.1.1 DISADVANTAGES OF LOW STOCK LEVEL

- Customer's demand can often not be satisfied, this can lead to an immediate loss of business, also to a loss of future business through customer dissatisfaction
- To maintain a reasonable service it will be necessary to place replenishment order more frequently, and so costing high.

2.1.2 DISADVANTAGES OF HIGH STOCK LEVEL

- Storage costs incurred very high. These costs not only cover buildings, labour, etc, but also allow for deterioration.
- A high capital invested in stocks necessarily means that there is less money available within the business for other requirements.
- Store items may become obsolete.
- With high stock levels of raw materials the sudden drop in market price of that material represents a cash loss.

2.2 TYPES OF INVENTORIES

Several different types of inventories may be maintained separately in large industrial organization.

The more common ones includes:

1. Raw materials, the basic ingredient for company's finished product.
2. Purchased parts and assemblies from outside suppliers, the component parts of the finished product.
3. Finished goods, completed and available for sale.
4. Operating (factory) supplies used in production peration.
5. Small tools and equipment used in production process, which are ultimately expense to the end product as overhead.
6. Office supplies and equipments.

2.2.1 THE CONVERSION CYCLE

The process of converting the raw materials to finished good is a conversion cycle. In this cycle three major types of inventories are involved.

2.2.2 RAW MATERIALS

By holding stock of raw materials, an organization decouples its primary production sections or processes from its raw material manufacturers or stockists.

2.2.3 WORK IN PROCESS

The holding of both raw material stocks and stocks of finished goods is generally a planned activity, whereas in process stocks are likely to exist in any manufacturing organization whether or not they are planned for.

The decoupling function provided by this category of inventory is to buffer the demand of a later stage in the production process (e.g sub-assemblies and final assemblies) from the supply of an earlier stage.

2.2.4 FINISHED GOODS

The stocking of finished goods provides a buffer between the customer's demand and manufacturer's supply.

2.3 OBJECTIVES OF THE INVENTORY SYSTEM

The overriding objectives of any inventory system is to provide logistic support to the production and marketing functions with the lowest practicable investment and reliable financial informations. The inventory system should be designed to provide

reasonable assurance that :

1. Inventory transactions are recorded and processed in accordance with managements general or specific authorization.
2. Inventory transactions are recorded in a manner
 - to permit preparation of financial statements.
 - to maintain accountability for inventory assets.
3. Access to inventory assets is permitted only in conformity with managements authorization.
4. The recorded accountability for inventory assets is compared with existing inventory assets at reasonable intervals, and appropriate action is taken with respect to any difference.
5. Data required to make appropriate business decisions are available on timely basis.

2.4 INVENTORY POLICIES

An organization stock holding policy implemented by a series of rules which determine how and when certain decisions concerning the holding of stock should be made. This series of rules is known as an inventory policy.

There are two basic types of inventory policies. Those in which decision concerning replenishment are based on the level of inventory held are known as "Re-order level policies" and those in which such decisions are made on a regular time basis are known as re_order cycle or periodic review policies.

2.4.1 THE RE-ORDER LEVEL POLICY :

This policy is often implemented as the two bin system. In this policy an order for replenishment is placed when the stock on hand equals or falls below a fixed value say N , known as re_order level. In this policy, therefore, the amount of inventory held must be reviewed continuously. The replenishment order whenever placed in this policy is for fixed quantity.

The excess of the reorder level over the expected demand during the lead time is called the safety stock or buffer stock. If the buffer stock is exhausted, the back ordering may be permitted, whereby demand orders are accepted even when no actual stock remains.

This policy is being implemented as two bin system, two bins of stock items are kept and a replenishment order is placed, when one bin becomes empty. Further stock is then withdrawn from the second bin until replenishment order is received to refill the second bin, the remainder being placed in the fresh bin. Thus the amount of stock held in the second bin represents the size of reorder level.

In practical situations two bins are not used, but one bin is kept to maintain the stock. A single bin with a dividing layer or partition serves exactly the same purpose. The system is most commonly used to operate successfully with physically small items, the system obviously becomes impracticable for large items.

2.4.2 THE RE-ORDER LEVEL OR PERIODIC REVIEW POLICY

As discussed above in Re-order level policy, for successful running the amount of stock on hand must be checked continuously but there are situations where continuous review is not possible. The situations where instead of two bins or single bin system paper records of stock on-hand are kept and where records are updated only at certain intervals of times.

Generally these are the situations with all but smallest items. Records being kept of stock items which can be located on several different shelves or even in different locations within a store, the re_order level policy is applied here with periodic reviews.

At each review, only if the stock on-hand is observed to fall below the reorder level, a replenishment order will be placed and this would be for a fixed quantity.

2.4.3 RE-ORDER CYCLE POLICY

In this inventory policy, the stock on-hand is reviewed periodically and a replenishment order placed at every review. The size of replenishment is variable and not fixed as discussed in earlier policies. This variable replenishment quantity is calculated as the difference of maximum stock levels and the stock on-hand at the time of reviews.

2.4.4 THE (S,S) POLICY

The (s,s) policy is again a policy in which stock on-hand is reviewed periodically.

At a review if the stock is observed fallen below or at a certain level 'S',

replenishment order is placed and the size of replenishment order placed is calculated to maintain a fixed inventory level of 'S'.

If at review there is no such situation, no replenishment is ordered.

The name (S,S) is only because the criteria described above. The figure illustrates the function of this policy.

2.4.5 THE COMBINED RE-ORDER LEVEL AND RE-ORDER CYCLE POLICY :

Other than two basic policies (the Re-order and Re_order cycle policies), their variants are also discussed in previous pages. This one is a possible combination of two.

Replenishment orders are placed periodically not only when the stock on-hand is reviewed, but also at times during the review periods when the stock on-hand falls below or at the re-order level M.

Since replenishment orders, in this policy are of two types, placed periodically and at reorder levels, the stock on-hand must be monitored continuously. The size of replenishment order at breakage of reorder level is to be fixed and as such the at reviews would be variable.

2.5 ECONOMIC PARAMETERS

Inventory operating costs :

There are three principle costs involved in operating an inventory system namely:

- The cost of ordering stock

- The cost of holding stock
- The cost of running out of stock

2.5.1 ORDERING COST

1. All the purchase department costs could be included as part of cost. The cost of ordering is generally assumed to be the same for all items irrespective of their value.

2. For purchased out items the cost of receiving goods might be included in ordering cost.

3. Those quality control costs incurred as a result of checking received replenishment orders might be included in the cost of ordering, but rarely are, as the costs are absorbed as general overheads.

2.5.2 HOLDING OR STORAGE COST

These include the cost of actually storing goods, such as relevant staff's salaries, warehouse expenses, deterioration, etc. The opportunity costs of money tied up in inventory should also be included as part of the overall holding costs. The costs and expenditures of permanent nature include the following:

1. Annual standard rent of the store accommodation.
2. Maintenance expenditures of the stores.
3. Pay, allowances, faring benefits and bonuses etc, of staff employed for the maintenance of stores.
4. Any other of the sort above mentioned.

2.5.3 SHORTAGE COSTS

The expenditures incurred in that particular components procurement whether from a neighboring unit or from the supplier, inland or abroad, will be one part of shortage cost. Whereas on the other part it will be the cost of the time that particular item remained idle.

The shortage cost would always be alarming and vital as compared to the holding cost, and as such as buffer stock are recommended.

CHAPTER 3

INTRODUCTION

3.1 INTRODUCTION

Computers are becoming an integral part of our life. From digital wrist-watches, card-driven sewing machines and digital inter-coms all use some form of computer techniques. Computers are not only applied for domestic usage but also they are used by government and private organizations where they are used for diverse tasks like record-keeping, inventory management, economic forecasting and message broadcasting etc. The use of computer as a tool for inventory control is now well-known fact. The inventory system is the back-bone of any organization involved in purchase/supply of items. An efficient inventory control system is the pre-requisite for successful working of any organization. For an inventory control system the computer can handle tasks like ledger-maintenance, record-keeping, order-tracking etc. In addition to answer queries required by the system users.

The system presented in this report is also an inventory control system of the organization (Pakistan Institute of Medical Sciences). Here a brief description of the organization and the system is presented.

3.2 ORGANIZATION OVERVIEW

The master plan of Islamabad Hospital complex (PIMS) was prepared in 1975, but it start functioning in 1985. PIMS has a big project under which many medical research department work. These are

- Diagnostic Areas
- Children Hospital

- College of Nursing and Para-Medical Nursing Institute.

The detailed description of each of these is give below

a) DIAGNOSTIC AREA

The hospital has a Pathology department fully equipped with a Blood bank, Radiology department with conventional radiography, C.T. Scanning and Ultra Sonography facilities and twelve operation theaters in addition to one emergency and accident center.

b) CHILDREN HOSPITAL

This hospital is a gift of the Japanese people to the people of Pakistan. It was established in December 1985, with an objective of providing primary and specialized health care to children. The children hospital has :

231 - Beds

70 - Doctors

160 - Nurses

300 - Clinical staff

About 1000 patients visit the hospital every day. This figure is expected to grow to 2000 soon. The children hospital has 10 clinics, out of which four are medical clinics, two for surgery and one for each dental, ENT filter and eye clinics.

c) COLLEGE OF NURSING AND PARA-MEDICAL INSTITUTE

It is the post-graduate training institute of PIMS which has the provision to train 126 nurses and 180 para-medical staff per year started functioning in August 1985.

Complex Hospital has 571 beds. The bed allocation arrangement is as follows

Inpatient	- 488		
General public	- 25		
Government officers	- 25	Accidents	- 14
V.I.P officers	- 19		

In PIMS, there are 20 departments meant for specific treatments and diagnostics.

These departments provides specialized treatment not only for the local body but also for the whole nation. The following departments exist in PIMS.

<u>S.NO</u>	<u>Deptt.</u>	<u>NO. of Patients</u>	<u>Function</u>
1.	Surgical	123	Surgical work
2.	Cardiology	65	Heart diseases
3.	Orthopaedic	1700	Provides medical care, Consultation, surgical services and bone diseases.
4.	Physiotherapy	65	Spinal and sports injuries.
5.	Neurology	60	Common diseases.
6.	Nephrology	100	Kidney problems.
7.	Ophthalmology	85	Eye diseases.
8.	Psychiatry	50	Emotional, anxiety and stress problems.
9.	Urology	50	Urine disease.
10.	Dental	100	Dental X-ray, extraction, filling and injections.

11.	Neurology	50	Brain diseases.
12.	Pulmonology	85	Chest diseases.
13.	Dermatology	100	Skin Diseases.
14.	Nero Surgery	40	Skin diseases.
15.	E.N.T	125	Ear, nose and throat diseases.
16.	Radiology	160	X-ray facilities.
17.	Pathology	175	Provide different laboratory tests.
18.	Gynecology	100	Provides treatments related to female diseases
19.	Pharmacy	2500	Issues Medicines to patients.
20.	Medical Stores	-	Purchases Medical and surgical equipments, drugs and medicines.

3.3 ORGANIZATIONAL SETUP

3.3.1 ORGANIZATION STRUCTURE

In all 2400 employees are working in PIMS which is headed by an executive director. The executive director is assisted by a joint-executive director, a deputy-executive director, an assistant director and other subordinates staff. For administrative matters, consultants head various departments. Patients reporting in the hospital are directed to their respective chemists and none of the patients is permitted to consult a doctor in any clinic unless he/she is registered at the reception.

3.3.2 OBJECTIVES OF THE ORGANIZATION

PIMS has been made to fulfill the following objectives:

1. To facilitate the patients from Islamabad, Rawalpindi and other areas.
2. To deal with the referred patients from all over Pakistan.
3. To facilitate the government servants living in Islamabad, Rawalpindi.
4. To provide post-graduate training facilities for the doctors and nurses.
5. To improve medical research work.
6. To improve the health standard.
7. To provide 625 hospital-bed facilities scientific diagnostic techniques.

3.4 EXISTING SYSTEM

Presently all the procedure for purchase and issue are performed by the stores staff manually. The demands for the various stores item arrive from various wards/departments at random.

Demands for various items are sent to the stores incharge on a proper slip named INDENT FORM. If the items are available in the stores, store incharge write down the no. of items in the indent form which will be issued and sends the form to the superintendent stores for final approval. After this items are issued. Store incharge keep one copy of indent form in ISSUE FILE.

If the items are not available in the store, the store incharge writes the remark N. is (not installed), store incharge prepares case for purchase of unavailable items and sends it to the purchase committee. Store incharge maintain a STOCK BOOK, after issuing

any article he updates the stock book.

PURCHASE PROCEDURE

In PIMS a Purchase Committee purchase items for different stores. This committee comprises of

- 1- CHAIRMAN
- 2- SECRETARY
- 3- SUPERINTENDENT GENERAL STORES(S.G.S)
- 4- ASSISTANT DIRECTOR (ADMAN)
- 5- SUPERINTENDENT HOUSE KEEPER
- 6- ONE PERSON FROM ACCOUNTS DEPARTMENT

Store incharge receives approximate demand for next coming year from house keeper and sends it to the purchase committee. Purchase committee call tenders/quotation from the prequalified suppliers.

On receipt of tenders/quotations, purchase committee decides which items are to be purchased.

Then purchase order is placed to the appropriate supplier. Three copies of supply order are prepared by purchase department, one copy is send to the supplier and two are received by store incharge. Each consignment is received on a delivery challan showing the quantity of items delivered on that date. On completion of total supply order, the supplier submits the bill. The items are taken on stock book by the store

incharge.

Store incharge receive three copies of bills, he sends two copies to accounts department and keep one copy for his own record. The amount to the supplier is paid by the accounts department.

3.5 DRAWBACKS OF THE EXISTING SYSTEM:

The present system involves several disadvantages, e.g

1. A lot of stationary like papers, registers, pens etc has to be used. This implies a lot of cost.
2. It is a time consuming process because all procedures have to be performed manually.
3. Error-checking is not properly implemented.
4. There is no guarantee of data consistency.
5. Storing and then retrieving information from ledgers and registers make office work quite slow.
6. Information stored on paper has a greater chance of being destroyed or lost.
7. Information stored on paper consume more space.
8. In the manual system all the calculations are done manually. This not only causes errors but also requires a lot of mental exertion.

3.6 OBJECTIVES OF THE PROPOSED SYSTEM:

The House Keeping store gets a large number of demands for various sorts of items from different departments. It has to keep track of all these demands apart from

fulfilling them at the right time. It also has to keep track of readily available balance of each item so that if an item needs replenishment, suppliers can be contacted for tenders/quotations and then supply orders can be issued to the most suitable supplier. In additions, the house keeping store also haste maintain record of each suppliers credit and check his bills. To perform all these activities manually is a Herculean task.

So, in order to get rid of the monotonic and tiresome activities of ledger-searching and file management the house keeping store department requested for computerization of its inventory control system. The project has been initiated with the following objectives:

1) SPEED:

File access and retrieval of information should be fast enough so that any desired information is available with in a small amount of time.

2) RELIABILITY:

The developed system should be accurate and error-free. For instance, it should display the exact balance of an item.

3) EFFICIENCY:

The computerized system should be an efficient system and should be friendly to the end-user, it should not confuse the user with a lot of technicalities and restrictions.

4) CONSISTENCY:

There should be no redundant data in any file. This will help in proper updates to the system information content.

5) SECURITY:

The system should not allow any unauthorized personnel to update the files.

CHAPTER 4

SYSTEM DESIGN

SYSTEM DESIGN

After analyzing the existing system and understanding its requirements including the improvements and modification required, system design was undertaken. System design is the process of translation of system requirements into two ways of meeting them.

System design is conducted in four spheres, viz output, input, codes and files. We discuss each of these in this chapter.

4.1 DESIGN OF OUTPUT:-

Output design is decided and finalized after detailed meetings and interviews with the end-user. It is also a duty of the system analyst to decide whether the system output is to be shown on the screen or directed to the printer. The House keeping store inventory system is designed to produce the following outputs:-

- 1) A list of all items and their codes.
- 2) A list of all departments/wards and their codes.
- 3) A list of firms alongwith their codes, addresses and telephone numbers.
- 4) Information about each item including its code,
- 5) Periodic reports (monthly etc.)
- 6) High level and low level items reports
- 7) Demand history including:

-Date

- Item name
- Department name
- Quantity demanded
- Quantity issued/received

4.2 DESIGN OF INPUTS:-

Input design is concerned with design of the screens which are to be presented to the user for various data entry purposes. In the proposed system it has been tried that the data entry screens should be easily understandable and if there is an ambiguity some where it should be solved with the aid of proper help messages.

4.3 CODES DESIGN:-

A code is a small combination of characters used to represent a large data item. Codes are used when the data to be handled is very large or where there is a chance of entering incorrect information. The issue of codes in a system claims many advantages, some of which are:

- 1) Codes saves computer storage as compared to actual data items.
- 2) They reduce the chance of spelling errors.
- 3) They speed up the data entry process. The present system uses codes to

represent the following entities:

- a) Item code

b) Department code

c) Firm code

An item code is a six bytes long alphanumeric code in which the first two bytes collectively represent the store name (Store having that item) and the next four bytes represent the sequence number of the item. A department/ward code is a four bytes alphanumeric code in which first two bytes are alphabetic (Alphabets represent either it is department/ward) and the next two bytes are sequence number of department/ward. A firm code is a four bytes long alphanumeric code that represents a unique firm.

4.4 FILE DESIGN:-

The proposed system uses several files to fulfill its requirements. All of these are indexed sequential files and allow for random and sequential access of data. A description of the files used by the system is given below:

1. **TRANSACT FILE:-** The structure of the transaction file is given below

FILE NAME : TRANSACT-FILE	PRIMARY KEY : IT_CODE
---------------------------	-----------------------

FIELD NAME	DESCRIPTION	TYPE	LENGTH
STATUS	ISSUE/RECIEVE	CHARACTER	02
IT-CODE	ITEM CODE	CHARACTER	06
DEP-CODE	DISTRIBUTER CODE/ DEPARTMENT CODE	CHARACTER	04
IS-RE-DATE	ISSUE/RECIEVE DATE	DATE	08
BILL-NO	BILL_NO.	NUMERIC	04
QTY-IS-RE	QUANTITY ISSUE/ RECEIVE	NUMERIC	06

PURPOSE: This file holdes data of all the daily transactions temporarily. After correct entry of all transactions, STOCK FILE and MASTER FILES are updated.

2. STOCK FILE:-

The structure of the stock file is given below

FILE NAME : STOCK-FILE PRIMARY KEY : IT_CODE

FIELD NAME	DESCRIPTION	TYPE	LENGTH
STATUS	ISSUE/RECIEVE	CHARACTER	02
IT-CODE	ITEM CODE	CHARACTER	06
DEP-CODE	DISTRIBUTER CODE/ DEPARTMENT CODE	CHARACTER	04
IS-RE-DATE	ISSUE/RECIEVE DATE	DATE	08
BILL-NO	BILL_NO.	NUMERIC	04
QTY-IS-RE	QUANTITY ISSUE/ RECIEVE	NUMERIC	06

PURPOSE: This file holds data about all transactions of various items permanently

3. MASTER FILE:-

The structure of the master file is give below

FILE NAME : MASTER-FILE	PRIMARY KEY : IT_CODE
-------------------------	-----------------------

FIELD NAME	DESCRIPTION	TYPE	LENGTH
IT-CODE	ITEM CODE	CHARACTER	06
QTY_IN_H	CURRENT STOCK	NUMERIC	04
L_TRA_DATE	LAST TRANSATION DATE	DATE	08
H_LEVEL	HIGH LEVEL	NUMERIC	04
L_LEVEL	LOW LEVEL	NUMERIC	03

PURPOSE: This file holds current stock and date of last transation,high level and low level permanently.

4. ITEM FILE:-

The structure of the master file is give below

FILE NAME : ITEM-FILE PRIMARY KEY : IT_CODE

FIELD NAME	DESCRIPTION	TYPE	LENGTH
IT-CODE	ITEM CODE	CHARACTER	06
IT_NAME	ITEM NAME	CHARACTER	30

PURPOSE: This file holds all the names of items and their codes.

5. DEPARTMENT FILE:-

The structure of the master file is give below

FILE NAME : DEP-FILE PRIMARY KEY : DEP- CODE

FIELD NAME	DESCRIPTION	TYPE	LENGTH
DEP_CODE	DEPARTMENT/WARD CODE	CHARACTER	04
DEP_NAME	DEPARTMENT/WARD NAME	CHARACTER	25

PURPOSE: This file holds all the codes of departments/wards codes and their names.

6. FIRM FILE:-

The structure of this file is given below

FILE NAME : FIRM-FILE

PRIMARY KEY: FM_CODE

FIELD NAME	DESCRIPTION	TYPE	LENGTH
FM_CODE	FIRM CODE	CHARACTER	04
FM_NAME	FIRM NAME	CHARACTER	30
FM_ADD	FIRM ADDRESS	CHARACTER	30
TEL_NO	TELEPHONE NO.	NUMERIC	06

PURPOSE: This file holds names and codes of the firms which supply different items to store.

CHAPTER 5

MACHINE

SELECTION

5.1 SELECTION OF MACHINE :-

In the light of aspects the analysis of the existing system and in view of the strategy of proposed system, it was concluded to select a machine for the House Keeping store of PIMS. A brief summary of the selections and recommendations is as follows:

1. There is a need for introducing a computer facility in the House keeping store of PIMS Islamabad.
2. The most suitable type of the computer facility comprises single user micro computer for the House keeping store of PIMS Islamabad.
3. In addition to computer facility, this organization should have a small computer centre with its own computer programmers and operators with an objective of growth.

5.2 STUDY METHODOLOGY:-

When the need of the computer facility for House keeping store was decided, then a detailed study needed to be conducted for:

1. What kind of computer facility is best suited?
2. What is the best strategy for implementing a computer facility in this organization. The study of the activities and associated information processing requirements of the House keeping store in PIMS Islamabad indicate that the present scope of information storage and processing was determined by the inherent limitations of manual information recording and analysis. An attempt was made to estimate the information storage and processing activities at each level if computer facility was made available. This task often amplified by the personal of the store who were not only aware of the power of the computer facility but

were very specific about how they would use such a facility.

All the information gathered during the study was assimilated in order to obtain indicators of volume and nature of the information that likely to be stored in computer. Along with this the nature of the analysis likely to be carried out and the stored information will be used in these analysis was postulated. This was then used for projecting the kind of computer facility required and evolving on strategy for its introduction in House keeping store and its related substores.

5.3 INVENTORY CONTROL MANAGEMENT:-

The inventory control ledger on issue receive value basis are maintained at the House keeping store and this in addition to the stock register on units basis. The format of the stock register contains the columns for the date, particulars, stock received, stock issued and balance of the record.

For an efficient system which should monitor an inventory of large number of items or an online basis inventory for about one year would require a storage space of about 82.5 M bytes.

5.4 COMPUTER HARDWARE REQUIREMENTS:-

The optimum strategy for the House keeping store is to install single user micro computer at the House keeping store which could monitor the inventory and keep records of all items issued and received.

5.5 RECOMMENDED CONFIGURATION FOR HOUSE KEEPING STORE:-

HARDWARE:

1. IBM compatible micro computer 80486 sx.
2. central processing unit having 1024 K bytes of processor and speed 25 M Hz.
3. Two drives of 5.25" and 3.50".
4. on line disk storage of 120 M bytes capacity.
5. A line printer of at least 250 lines per minute speed.
6. 14" VGA colored Monitor.

SOFTWARE:

1. Foxpro 2.5
2. Operating system DOS
3. A word processing package.

5.6 COST ESTIMATES:-

The cost estimates for the above specification according to the market rates are given below :

Computer price 45,000.00 approx.

Printer price 15,000.00 approx.

Total Estimated price = 60,000.00 approx.

(For one computer)

CHAPTER 6

SYSTEM DEVELOPMENT & IMPLEMENTATION

6.1 SOFTWARE DEVELOPMENT:

The aim of software development is to develop computer programs which are capable of processing input into a desired output form. The programs written for the purposed system are given below:

6.1.1 PROGRAMS FOR INITIALIZATION:

When ever the user wants to start with the database, the very first step is to initialize all files so that new data could be entered in these files.

When the user asks the system to initialize the files, the system warns him that he will lose all previous data. Only when the user re-affirms his intention to initialize the files, the system does so.

6.1.2 PROGRAMS FOR INSERTION:

This process is required when new records are to inserted into various files. The programs contain several checks that can be used to ensure the authenticity of data.

6.1.3 PROGRAMS FOR DELETION:

These programs are needed when the user wants to delete some records from the files.

6.1.4 PROGRAMS FOR RETRIEVAL:

These programs assist the user to retrieve various records from the various files. The user has the facility to access the files sequentially or at random.

6.1.5 PROGRAMS FOR EDITING:

These programs are called when the user wants to edit the particular record from the specific file. It is required to provide key of the record to edit. The system displays the records on the screen, the user can edit any field except the key field of the record.

6.1.6 PROGRAMS FOR QUERIES:

These programs have been written to answer several queries by the users. A single query program may access several files.

6.1.7 PROGRAMS FOR REPORTS:

These programs generate the various reports required by the system user.

6.2 SYSTEM IMPLEMENTATION:

The process in which the present system is replaced by the new one is called implementation. There are three approaches to system implementation, viz

- Direct Conversion
- Parallel Conversion
- Pilot Conversion

6.2.1 DIRECT CONVERSION:

In this approach, a completely new system is introduced without any reference to any previous similar system which may exist. This method is used only when the new system is completely different from the existing system.

6.2.2 PARALLEL CONVERSION:

In this conversion method, the data is processed simultaneously by both the new and

the old system in order to cross-check results. When the organization is fully satisfied that the new system provides the desired results, the old system is replaced by the new one

6.2.3 PILOT CONVERSION:

In this approach, a subsystem is substituted for a part of the old system. This method is useful for every large system.

6.3 PROPOSED CONVERSION METHOD:

For the proposed inventory system, parallel conversion method is recommended. The parallel method involves continuing the former system for a certain length of time after the new system is put into operation. This provides an opportunity to compare results of the new system with those obtained by the previous method and thus gives realistic approach to be made of the frequency of errors and of operational efficiency. This will also help in saving the house keeping store inventory system from crash in case the new system fails.

Also this method of conversion will eliminate the feelings of panic because the old system will still in operation

CHAPTER 7

SYSTEM

EVALUATION

SYSTEM EVALUATION

System evaluation is important because it judges the compatibility of the developed system with the existing system and checks its validity under organizational constraints.

The new system has several advantages over the present system, the most important of these are:

1. Accuracy
2. Efficiency
3. Non-redundancy
4. Timeliness
5. Error control
6. User-friendliness

ACCURACY:-

The new system produces accurate results first, because it includes several checks to ensure validity of the data input, and secondly because it is performed by the computer which has no danger of miscalculation. Thus the system displays the exact amount, the exact balance of an item etc.

EFFICIENCY:-

The system is an efficient system because it has been developed keeping in mind the requirements of the user at the touch of button. The user can get any information like status of an order, relative prices of an item available from different suppliers, item purchased from

a supplier, item that are about to expire etc.

NON-REDUNDANCY:-

All files used by the system are in third normal form. Data from different files can be retrieved in several different formats. The system can answer several queries by searching multiple files simultaneously. This give the verdict of non-redundancy.

TIMELINESS:-

In the new system it has been tried that the system should be able to give all the crucial information at the proper timre, for example, it is able to display the list of all items that have reached the reorder-level.

ERROR-CONTROL:-

The new system incorporates several error-control features, e.g

- It does not allow to enter the wrong item code.
- For the fields expecting numeric data, any other data type is not accepted.
- If an effort is made to input illogical data, e.g issuing more items than the available balance, the system refuses to accept the record. Similarly, if one tries to enter the consignment of an item which has never ordered, the system raises an error condition.

FUTURE EXTENSION:-

All the features that are lacking from the system may be added in the future. For example, the system can be converted to be multi-user system by providing file and record locking along with deadlock protection. There are other useful features which may be

incorporated into the system later on.

USER-FRIENDLINESS:-

The developed system has been programmed as a user-friendly system. The user-interface is simple and easy to understand. Whenever there is a chance of an ambiguity, help message in an easy understandable language are provided. Inspire if the merits claimed above, several desirable features may be found missing from the system. These have been left mainly due to the timing constraints and can be included with the passage of time. One major drawback of the system is that it does not support multiple users simultaneously.

CHAPTER 8

USER'S GUIDE

USER'S GUIDE:

The user of any new system is questionable for the user. Although the system under consideration is menu driven; options provided are self explanatory, proper help messages are available at every step where user can face difficult in operation, but to operator the system successfully without any difficulty this guide would help the user.

TO START THE SYSTEM :-

In order to start with the developed system switch on the computer and load the system and type "FOX" followed by < ENTER >. After this foxpro command window will appear.

Type " DO START " press <ENTER>. First off all the password screen appears and the system asks for password. After the entry of correct password " Main menu" will appear on screen.

This menu contain the options

- DATA ENTRY
- RETRIEVAL
- REPORTS
- QUIT

After selection of option the respective routine is called and executed. The function of each option provided by the system are given below.

DATA ENTRY :-

This module has been designed to let the user feed records or information in different files. When this option is selected the system will display the files on the screen asking the user to select a file for data entry. One can select the file by using the up and down arrow key and then press <ENTER> key. The system will then display the data entry screen for that file. To ensure valid data entry, several checks have been put into the program that force the user to enter correct data. For each file one can select the option of "Edit" and "Delete" option.

RETRIEVAL :-

Some time, the user do not want to deal with a single record at a time. Rather they may be interested in group of records that certifies a particular criterion of selection. e.g If we want to see all the items issued/received on a particular date. In these the retrieval (queries) option will be used. Each one ask the user to specify the criterion for the selection of records, it then retrieves all the records that satisfy this criterion and displays their list on the screen.

REPORTS :-

This module resemble the retrieval module in the sense that it also deals with groups of records. The difference is that here the outputs are displayed on screen as well directed

to the printer to get the outputs in report forms. From any subsequent menu the user has option to return to the main menu.

The appearance of main menu options on screen are given on next pages:

M A I N M E N U

INVENTORY CONTROL SYSTEM FOR
PAKISTAN INSTITUTE OF MEDICAL SCIENCES
ISLAMABAD

DATA ENTRY

RETRIEVAL

REPORTS

QUIT

TRANSACTION FILE	▶
ITEM FILE	▶
DEPARTMENT/WARD FILE	▶
FIRM FILE	▶

To select an option highlight it and press < ENTER >

M A I N M E N U

INVENTORY CONTROL SYSTEM FOR
PAKISTAN INSTITUTE OF MEDICAL SCIENCES
ISLAMABAD

DATA ENTRY

RETRIEVAL

REPORTS

QUIT

TRANSACTION

ADD

ITEM FILE

EDIT

DEPARTMENT/W

UPDATE

FIRM FILE

To select an option highlight it and press < ENTER >

M A I N M E N U

INVENTORY CONTROL SYSTEM FOR
PAKISTAN INSTITUTE OF MEDICAL SCIENCES
ISLAMABAD

DATA ENTRY

RETRIEVAL

REPORTS

QUIT

TRANSACTION

ADD

NEW

ITEM FILE

EDIT

OLD

DEPARTMENT/W

UPDA

FIRM FILE

To select an option highlight it and press < ENTER >

M A I N M E N U

INVENTORY CONTROL SYSTEM FOR
PAKISTAN INSTITUTE OF MEDICAL SCIENCES
ISLAMABAD

DATA ENTRY

RETRIEVAL

REPORTS

QUIT

TRANSACTION FILE ▶

ITEM FILE

DEPARTMENT/

FIRM FILE

ADD

DELETE

EDIT

To select an option highlight it and press < ENTER >

M A I N M E N U

INVENTORY CONTROL SYSTEM FOR
PAKISTAN INSTITUTE OF MEDICAL SCIENCES
ISLAMABAD

DATA ENTRY

RETRIEVAL

REPORTS

QUIT

TRANSACTION FILE ▶

ITEM FILE ▶

DEPARTMENT/WARD

FIRM FILE

ADD

DELETE

EDIT

To select an option highlight it and press < ENTER >

M A I N M E N U

INVENTORY CONTROL SYSTEM FOR
PAKISTAN INSTITUTE OF MEDICAL SCIENCES
ISLAMABAD

DATA ENTRY

RETRIEVAL

REPORTS

QUIT

TRANSACTION FILE ▶

ITEM FILE ▶

DEPARTMENT/WARD ▶

FIRM FILE

ADD

DELETE

EDIT

To select an option highlight it and press < ENTER >

M A I N M E N U

INVENTORY CONTROL SYSTEM FOR
PAKISTAN INSTITUTE OF MEDICAL SCIENCES
ISLAMABAD

DATA ENTRY

RETRIEVAL

REPORTS

QUIT

STOCK FILE	▶
MASTER FILE	▶
ITEM FILE	▶
DEPARTMENT/WARD FILE	▶
FIRM FILE	▶

To select an option highlight it and press < ENTER >

M A I N M E N U

INVENTORY CONTROL SYSTEM FOR
PAKISTAN INSTITUTE OF MEDICAL SCIENCES
ISLAMABAD

DATA ENTRY

RETRIEVAL

REPORTS

QUIT

STOCK FILE

IT_CODE WISE

MASTER FILE

DATE WISE

ITEM FILE

DATE BETWEEN

DEPARTMENT/WARD FILE

FIRM FILE

To select an option highlight it and press < ENTER >

M A I N M E N U

INVENTORY CONTROL SYSTEM FOR
PAKISTAN INSTITUTE OF MEDICAL SCIENCES
ISLAMABAD

DATA ENTRY

RETRIEVAL

REPORTS

QUIT

STOCK FILE ▶

MASTER FILE ▶

ITEM FILE

ITEM CODE WISE

DEPARTMENT

FIRM FILE ▶

To select an option highlight it and press < ENTER >

M A I N M E N U

INVENTORY CONTROL SYSTEM FOR
PAKISTAN INSTITUTE OF MEDICAL SCIENCES
ISLAMABAD

DATA ENTRY

RETRIEVAL

REPORTS

QUIT

STOCK FILE ▶

MASTER FILE

ITEM FILE

DEPARTMENT/WA

FIRM FILE ▶

CURRENT STOCK

LOW LEVEL

To select an option highlight it and press < ENTER >

M A I N M E N U

INVENTORY CONTROL SYSTEM FOR
PAKISTAN INSTITUTE OF MEDICAL SCIENCES
ISLAMABAD

DATA ENTRY

RETRIEVAL

REPORTS

QUIT

STOCK FILE ▶

MASTER FILE ▶

ITEM FILE ▶

DEPARTMEN

DEPT/WARD CODE WISE

FIRM FILE

To select an option highlight it and press < ENTER >

M A I N M E N U

INVENTORY CONTROL SYSTEM FOR
PAKISTAN INSTITUTE OF MEDICAL SCIENCES
ISLAMABAD

DATA ENTRY

RETRIEVAL

REPORTS

QUIT

STOCK FILE ▶

MASTER FILE ▶

ITEM FILE ▶

DEPARTMENT/WARD FILE ▶

FIRM F

FIRM CODE & NAME

To select an option highlight it and press < ENTER >

M A I N M E N U

INVENTORY CONTROL SYSTEM FOR
PAKISTAN INSTITUTE OF MEDICAL SCIENCES
ISLAMABAD

DATA ENTRY

RETRIEVAL

REPORTS

QUIT

STOCK FILE	▶
MASTER FILE	▶
ITEM FILE	▶
DEPARTMENT/WARD FILE	▶
FIRM FILE	▶

To select an option highlight it and press < ENTER >

M A I N M E N U

INVENTORY CONTROL SYSTEM FOR
PAKISTAN INSTITUTE OF MEDICAL SCIENCES
ISLAMABAD

DATA ENTRY

RETRIEVAL

REPORTS

QUIT

STOCK F

DATE WISE

MASTER F

DATE BETWEEN

ITEM FILE

DEPARTMENT/WARD FILE ▶

FIRM FILE ▶

To select an option highlight it and press < ENTER >

M A I N M E N U

INVENTORY CONTROL SYSTEM FOR
PAKISTAN INSTITUTE OF MEDICAL SCIENCES
ISLAMABAD

DATA ENTRY

RETRIEVAL

REPORTS

QUIT

STOCK FILE ▶

MASTER F

CURRENT BALANCE

ITEM FIL

LOW LEVEL

DEPARTMENTAL STOCK FILE

FIRM FILE ▶

To select an option highlight it and press < ENTER >

M A I N M E N U

INVENTORY CONTROL SYSTEM FOR
PAKISTAN INSTITUTE OF MEDICAL SCIENCES
ISLAMABAD

DATA ENTRY

RETRIEVAL

REPORTS

QUIT

STOCK FILE ▶

MASTER FILE ▶

ITEM FILE

ITEM CODE & NAME

DEPARTME

FIRM FILE ▶

To select an option highlight it and press < ENTER >

M A I N M E N U

INVENTORY CONTROL SYSTEM FOR
PAKISTAN INSTITUTE OF MEDICAL SCIENCES
ISLAMABAD

DATA ENTRY

RETRIEVAL

REPORTS

QUIT

STOCK FILE ▶

MASTER FILE ▶

ITEM FILE ▶

DEP

DEPT/WARD CODE & NAME

FIR

To select an option highlight it and press < ENTER >

M A I N M E N U

INVENTORY CONTROL SYSTEM FOR
PAKISTAN INSTITUTE OF MEDICAL SCIENCES
ISLAMABAD

DATA ENTRY

RETRIEVAL

REPORTS

QUIT

STOCK FILE ▶

MASTER FILE ▶

ITEM FILE ▶

DEPARTMENT/WARD FILE ▶

FIRM FILE

FM-CODE & NAME

To select an option highlight it and press (ENTER)

M A I N M E N U

INVENTORY CONTROL SYSTEM FOR
PAKISTAN INSTITUTE OF MEDICAL SCIENCES
ISLAMABAD

DATA ENTRY

RETRIEVAL

REPORTS

QUIT

YES

NO

To select an option highlight it and press < ENTER >

CHAPTER 9

APPENDICES

LIST OF ITEMS AND THEIR CODES

<u>CODES</u>	<u>ITEM NAMES</u>
HK0001	ACID SULFURIC.
HK0002	AIR FRESHENER 375 MI (IMPORTED).
HK0003	BLADE TREET PLATINUM PKT 05 NO.
HK0004	BLADE ATOM PKT 10 NO.
HK0005	BEGAN SPRAY 375 M1.
HK0006	BRASS METAL POLISH NO.6
HK0007	BROOM GOUA 500 GRAMS WITH RUBBER RING.
HK0008	BROOM SOFT WITH RUBBER RING.
HK0009	BELT FOR SEWING MACHINE, ORIGINAL JAPAN.
HK0010	BUTTON SHIRT DIFFERENT COLOUR, B/Q
HK0011	BUTTON PAINT DIFFERENT COLOR, B/Q
HK0012	BUTTON COAT WHITE COLOR, B/Q
HK0013	BUCKET PLASTIC HIGH 12" X DIA 13" WITH ALUMINUM HANDLE.
HK0014	BOTTLE BURSH B/Q.
HK0015	BLEACHING POWDER (ADAMJEE).
HK0016	BULB TORCH PIN TYPE.
HK0017	BULB TORCH SCREW TYPE.

HK0018	CASTIC SODA.
HK0019	CURTAIN RUNNER PKT 288 NO.
HK0020	CURTAIN HOOKS DIAMOND PKT 144 NO.
HK0021	COTTON TYPE 1/2" X 30 MTR ROLL.
HK0022	COTTON ROPE 1/2" DIA, B/Q.
HK1023	COTTON ROPE 1/4" DIA, B/Q
HK0024	COMMODE CLEANING BURSH B/Q.
HK0025	CARPET BURSH B/Q.
HK0026	CELL PIN LIGHT TOSHIBA.
HK0027	CELL MEDIUM SIZE 555.
HK0028	CELL LARGE SIZE 555.
HK0029	COIERY MATE SIZE 3' X 2', B/Q.
HK0030	CARPET SYNTHETIC VELOUR COLOR.
HK0031	COOKING SPOON STAINLESS STEEL.
HK0032	DUSTER WHITE SIZE 20" X 20", B/Q.
HK0033	DUSTER WHITE SIZE 20" X 20", B/Q.
HK0034	DETERGENT POWDER PANDA BAG 10 KG.
HK0035	DETERGENT POWDER SUNLIGHT PKT 1000 GRAMS LIVER BRAS.
HK0036	DISH WASHING LIQUID SUPER HIT.
HK0037	DISH WASHING BURSH B/Q.
HK0038	DOOR MATE RUBBER SIZE 2' X 1 1/2' B/Q.--HK0039 DUSTBIN WITH WHEEL TROLLY B/Q

HK0040	DINNER SET 76 PCS, CHINA.
HK0041	ELECTRIC HEATER SINGLE ROD, B/Q.
HK0042	ELECTRIC HEATER DOUBLE ROD, B/Q.
HK0043	ELECTRIC KETTLE SANYO.
HK0044	ELEMENT FOR ELECTRIC KETTLE/STERILIZER 2000 WATT.
HK0045	FORMALIN BOTTLE 400 ML.
HK0046	FLIT PUMP WITH PLASTIC BOTTLE B/Q.
HK0047	FLY FLAPPER PLASTIC B/Q.
HK0048	FRY PAN 10" DIA STAINLESS STEEL, B/Q.
HK0049	FRY PAN 14" DIA STAINLESS STEEL, B/Q.
HK0050	HAND SEWING NEEDLE NATY PKT 10 NO.
HK0051	HAWAII CHAPPLE BATA DIFFERENT SIZE.
HK0052	HEATER ROD 1000 WATT.
HK0053	JAI-NAMAZ SIZE 2.5' X 4' B/Q.
HK0054	K-2 OIL.
HK0055	KITCHEN KNIFE MEDIUM SIZE.
HK0056	KITCHEN KNIFE LARGE SIZE.
HK0057	LOTA PLASTIC LARGE SIZE B/Q.
HK0058	MOPING CLOTH SIZE 20" X 20" B/Q.
HK0059	MAX POWDER POLYTHING BAG 500 GRAMS LIVER BRAS.
HK0060	MACHINE OIL SINGER BOTTLE 85 GRAMS.

HK0061	MUG PLASTIC LARGE SIZE, B/Q.
HK0062	NIPHTHINE BALL.
HK0063	PHENYLE CARBOLINE FINIS TIN 03 LTRS.
HK0064	PLASTIC HANGER.
HK0065	PUCHARA WOODEN WITH 1/2" DIA GI PIPE SIZE 2" X 12" X 5'.
HK0066	PAD LOCK (TRICIRCLE CHINA) 2.5".
HK0067	PAD LOCK (TRICIRCLE CHINA) 2".
HK0068	PAD LOCK (TRICIRCLE CHINA) 2.5 1/2".
HK0069	ROBIN NEEL PKT 450 GRAMS.
HK0070	RICE COOKING SPOON STAINLESS STEEL B/Q.
HK0071	RECEPTICAL PLASTIC WITH COVER HEIGHT 18.5" X 16" B/Q.
HK0072	RATE KILLER (MOUSE CATCHER).
HK0073	SUTHALI.
HK0074	STEEL WOOL B/Q.
HK0075	SURF POWDER PKT 1000 GRAMS, LIVER BROS
HK0076	SURF POWDER PKT 200 GRAMS, LIVER BROS.
HK0077	SODA ASH I.C.I.
HK0078	SALT STONE.
HK0079	SOAP LUX LARGE SIZE
HK0080	SOAP CAPRI MINI SIZE.

HK0081	SOAP LIFE BOY LARGE SIZE.
HK0082	SHAVING CREAM ADMIRAL.
HK0083	SCISSOR WITH BRASS HANDLE SIZE 10" RATI.
HK0084	SCRABING BURSH B/Q.
HK0085	SLEEPER BATA DIFFERENT SIZES, B/Q.
HK0086	SAUCEPAN STAINLESS STEEL WITH COVER 8" DIA B/Q.
HK0087	SEWING MACHINE NEEDLE CHINA DIFFERENT SIZES.
HK0088	SWEEP TOILET CLEANER AND DRAIN OPENER LARGE SIZE.
HK0089	SALT POT 03 PCS SET PLASTIC B/Q.
HK0090	TOILET PAPER ROSE PETAL.
HK0091	TISSUE PAPER ROSE PETAL 100 X 2.
HK0092	TORCH 03 CELL CHINA STAINLESS STEEL.
HK0093	TORCH 02 CELL CHINA STAINLESS STEEL.
HK0094	TABLE LAMP, WIRE AND 100 WATT BULB.
HK0095	THERMOS PEACOCK MADE IN JAPAN 01 TR,ORIGINAL.
HK0096	THERMOS FLASK PRESS TYPE LARGE SIZE MADE IN JAPAN,2.5 LTR.
HK0097	TABLE RUBBER MATE SET 06 PCS.

HK0098	TAILOR MARKING CHALK PKT 10 NO.
HK0099	TAILOR INCHI TAPE CHINA
HK0100	TEA SET STAINLESS STEEL 03 PCS, TWO CUPS.
HK0101	TEA SET STAINLESS STEEL 03 PCS, 06 CUPS.
HK0102	TEA CUP WITH SAUCER MADE IN CHINA.
HK0103	TEA SPOON STAINLESS STEEL, B/Q.
HK0104	TABLE SPOON STAINLESS STEEL B/Q.
HK0105	TABLE KNIFE STAINLESS STEEL B/Q.
HK0106	TABLE FROCK STAINLESS STEEL B/Q.
HK0107	COOPEX POWDER 100.GRAMS.
HK0108	SPRAY OIL FINIS SUPER SONIC TIN 912 ML.
HK0109	SPRAY OIL TYFON SUPER PERFUMED TIN 912 ML.
HK0110	SPRAY OIL COOPEX BOTTLE 900 ML.
HK0111	WIPER STAR B/Q.
HK0112	WATER COOLER RAHBER 09 LTR, B/Q.
HK0113	WATER SET (MADE IN JAPAN).
HK0114	WATER JUG GLASS OMROC B/Q..
HK0115	WATER GLASS OMROC B/Q.
HK0116	WATER JUG STAINLESS STEEL B/Q.
HK0117	WALL CLOCK RETHYME MADE IN JAPAN.

HK0118	WALL CLOCK PAKISTANI B/Q.
HK0119	FULL PLATE PLASTIC (DINNER).
HK0120	QUARTER PLATE PLASTIC (SWEET).
HK0121	FLOOR POLISH KIWI TIN 03.KG.
HK0122	COMBOWED CLEANING BRUSH.
HK0123	PEDESTAL FAN 24" (PAK FAN).
HK0124	PEDESTAL FAN 22" (PAK FAN).
HK0125	COLOR TELEVISION WITH REMOTE CONTROL 20".
HK0126	COLOR TELEVISION WITH REMOTE CONTROL 22".
HK0127	FRIDGE DAWLANCE 10 CFT DOUBLE DOOR.
HL0128	FRIDGE DAWLANCE 6 CFT DOUBLE DOOR.

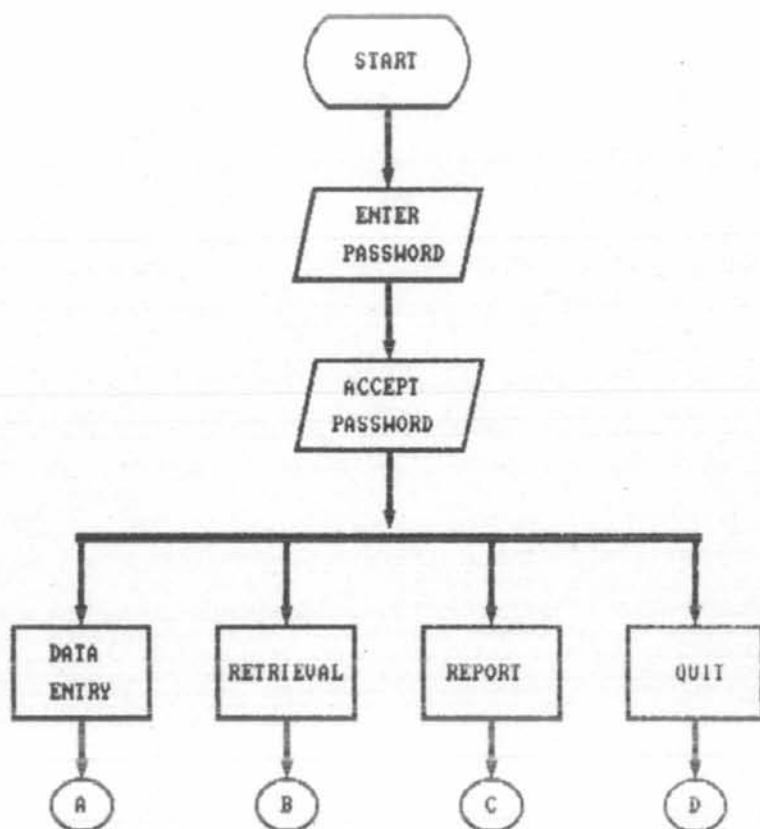
DEPARTMENT/WARD NAMES AND THEIR CODES

CODES	DEPARTMENT/WARD NAME
DP01	AUDIT SECTION
DP02	ADMINISTRATION
DP03	ALLERGY (O.P.D)
DP04	BOILER & CHILLER
DP05	BOARD OF GOVERNER SECRETRATE
DP06	BLOOD BANK
DP07	BOILER STORE
DP08	CASH SECTION
DP09	C.C.U
DP10	CARDIOLOGY
DP11	C.P.S.C
DP12	CARDIOLOGY (O.P.D)
DP13	DOCTORS' MESS
DP14	DERMATOLOGY (O.P.D)
DP15	DENTAL SURGERY (O.P.D)
DP16	E.A.C
DP17	EMERGENCY O.T
DP18	EPIDEMOLOGY
DP19	ENGINERRING (CIVIL)
DP20	ENGINERRING (ELECTRICAL)
DP21	ENGINEERING STORE
DP22	EYE (O.P.D)
DP23	E.N.T
DP24	FURNITURE STORE
DP25	GYNEACOLOGY
DP26	GESTENTROLOGY

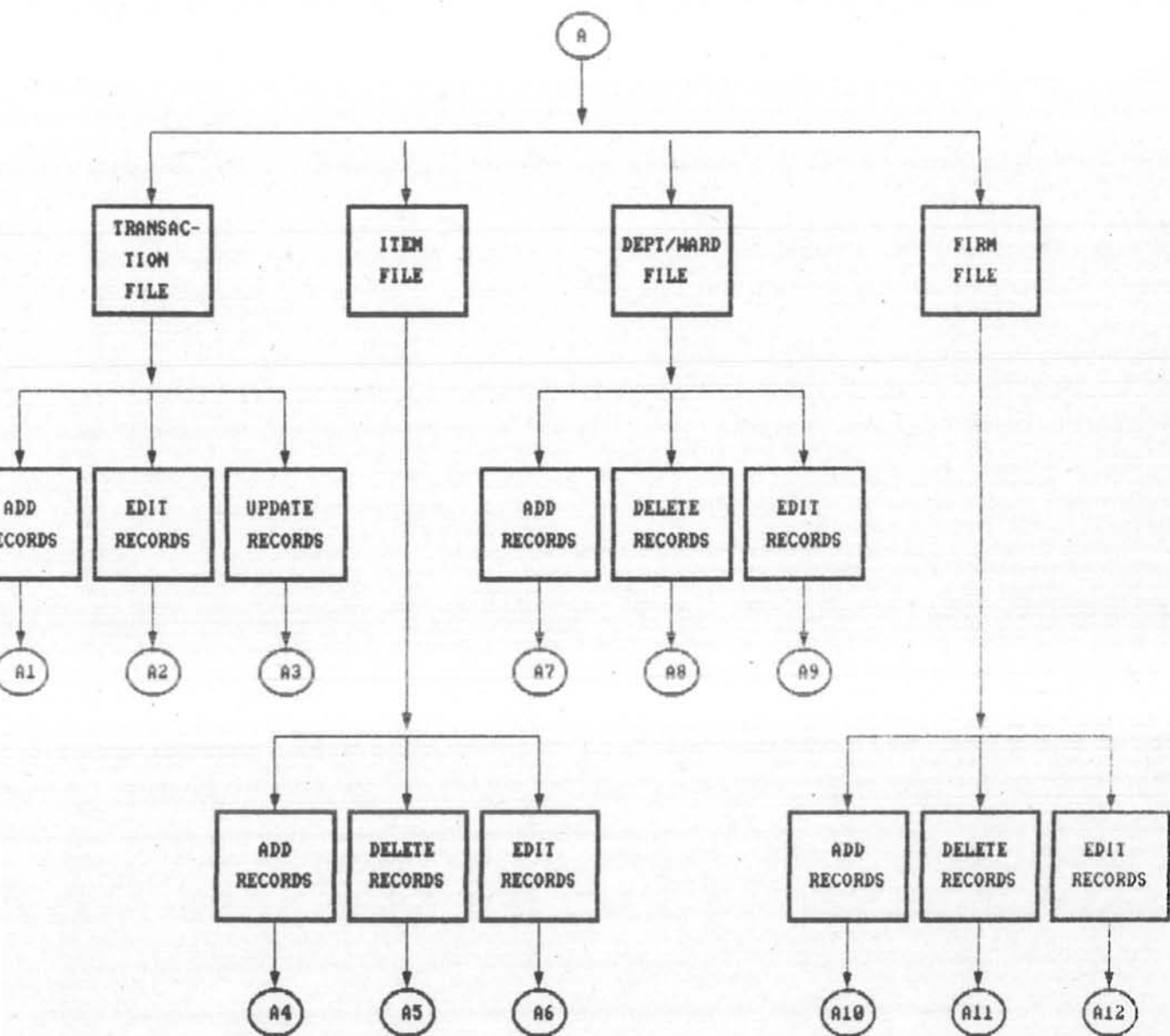
DP27	HOUSE OFFICER MESS
DP28	HOUSE KEEPING STORE
DP29	HORTICULTURAL & GARDENS
DP30	HOUSING
DP31	I.C.U
DP32	I.V.FLUID STORE
DP33	KITCHEN
DP34	LINEN STORE
DP35	LAUNDRY
DP36	MEDICAL WARD 1
DP37	MEDICAL WARD 2
DP38	MEDICAL WARD 3
DP39	MEDICAL WARD 4
DP40	MEDICAL WARD 5
DP41	MEDICAL WARD 6
DP42	MEDICAL EQUIPMENTS
DP43	MECHANICAL ENGINEERING
DP44	MEDICAL EQUIPMENT STORE
DP45	MEDICAL (O.P.D)
DP46	NURSES MESS
DP47	NEUROLOGY (O.P.D)
DP48	NEURO SERGERY (O.P.D)
DP49	NEPHROLOGY (O.P.D)
DP50	ORTHPEDIC (O.P.D)
DP51	ONCOLOGY (O.P.D)
DP52	P.B.S.O
DP53	PATHOLOGY
DP54	PHESIOTHERAPY (O.P.D)
DP55	PSYCHOLOGY (O.P.D)
DP56	PLASTIC SURGERY (O.P.D)

DP57	PULMONOLOGY
DP58	PRIVATE WARD (FIRST FLOOR)
DP59	PRIVATE WARD (GROUND FLOOR)
DP60	QUAID-I-AZAM POST GRADUATE MEDICAL COLLEGE
DP61	RADIOLOGY
DP62	RHEUMATOLOGY (O.P.D)
DP63	SENIOR ACCOUNT OFFICE
DP64	STATIONARY STORE
DP65	SYRUP STORE
DP66	SURGICAL (O.P.D)
DP67	SURGICAL WARD 1
DP68	SURGICAL WARD 2
DP69	SURGICAL WARD 3
DP70	SURGICAL WARD 4
DP71	SURGICAL WARD 5
DP72	SURGICAL WARD 6
DP73	SERVICES
DP74	SECURITY
DP75	SCHOOL OF NURSING
DP76	TEA ROOM
DP77	TRANSPORT
DP78	TABLET & INJECTION STORE
DP79	UROLOGY

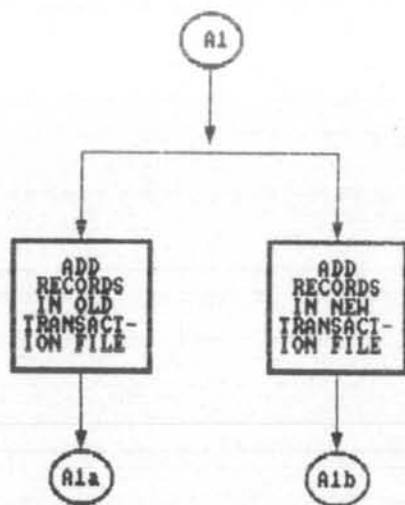
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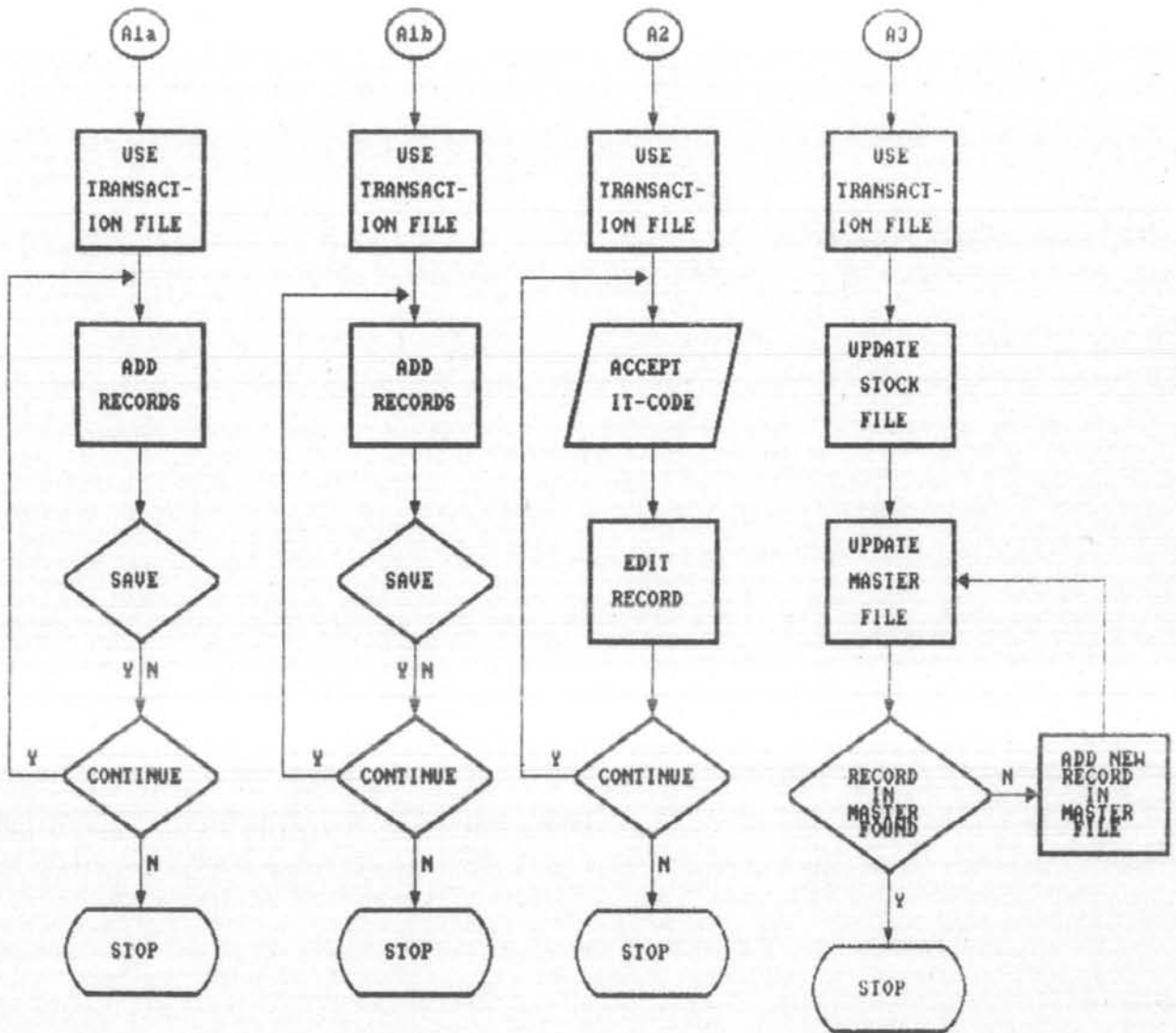
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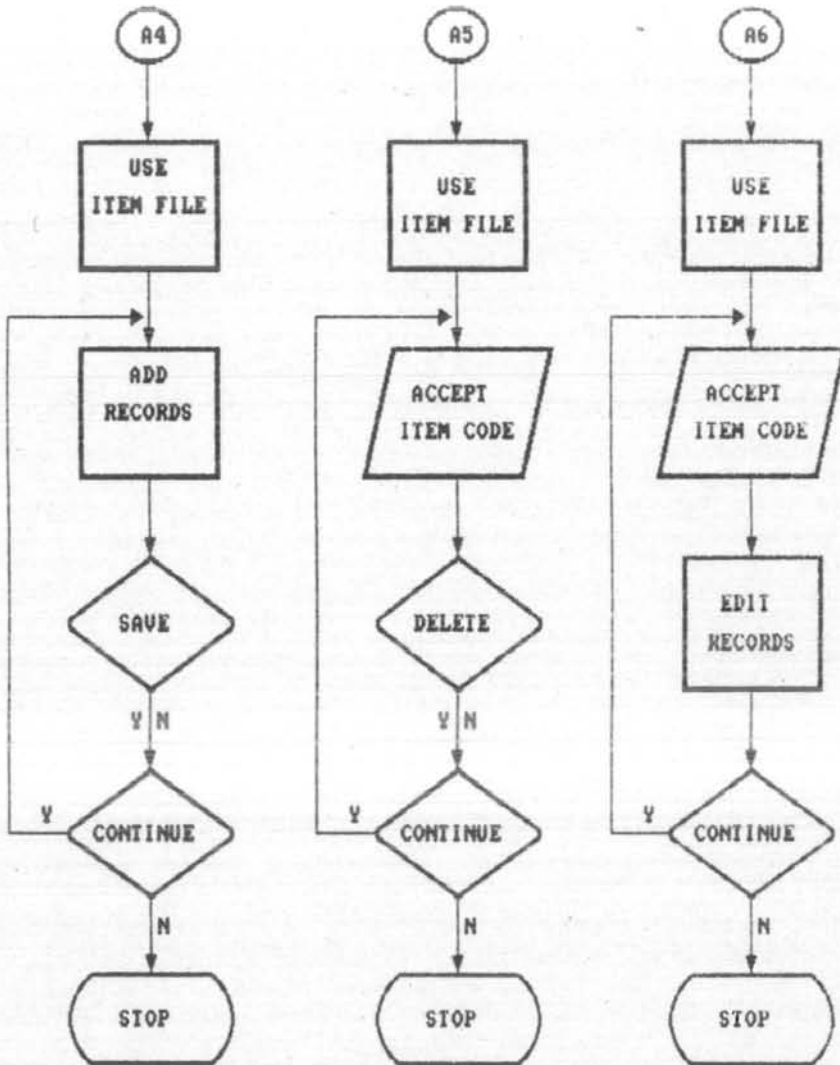
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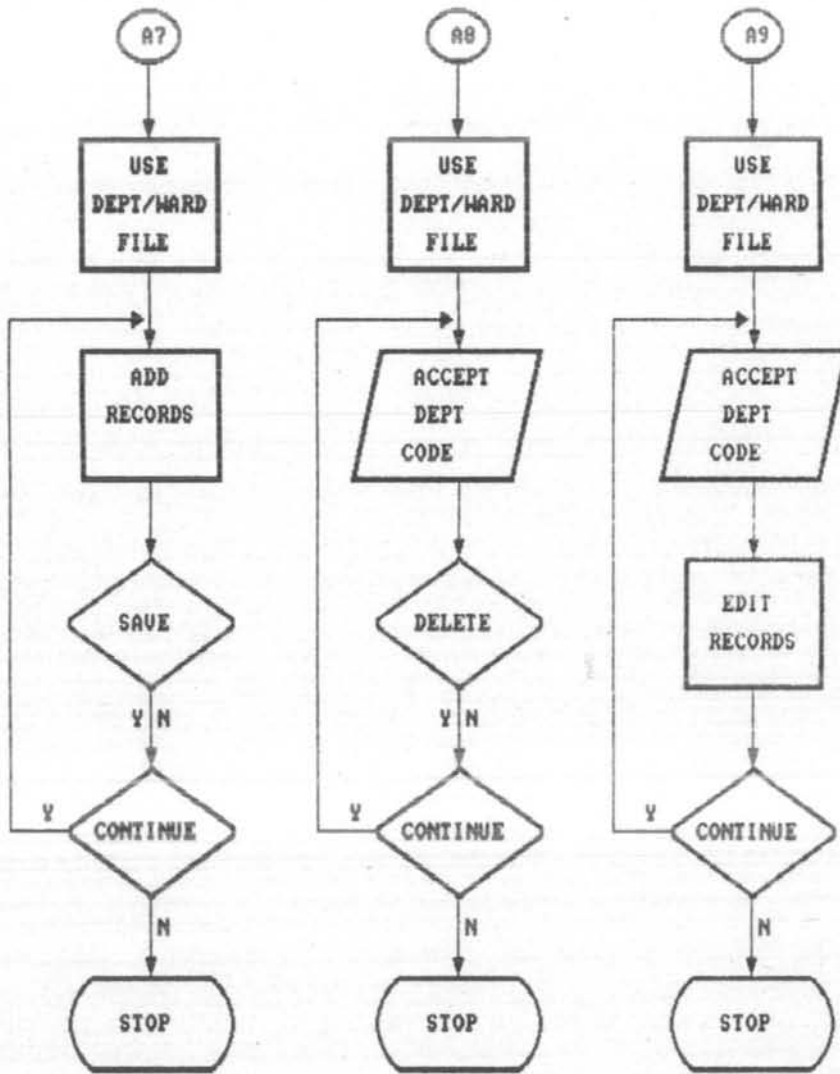
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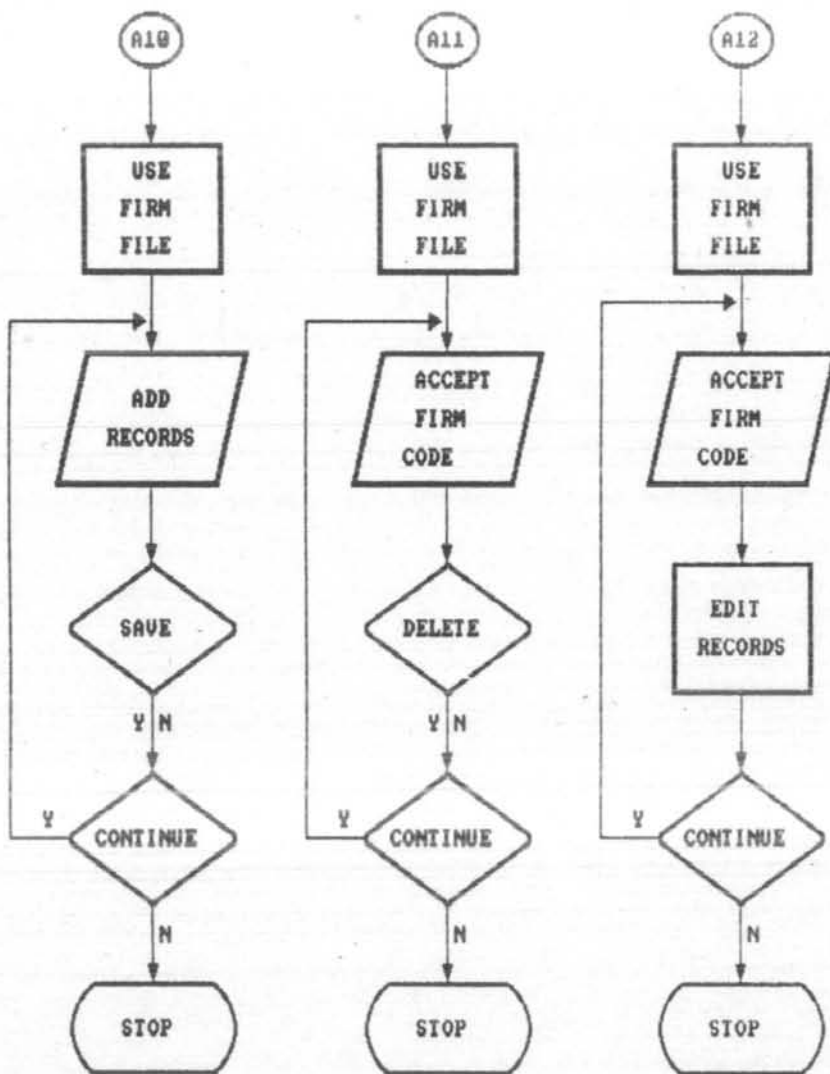
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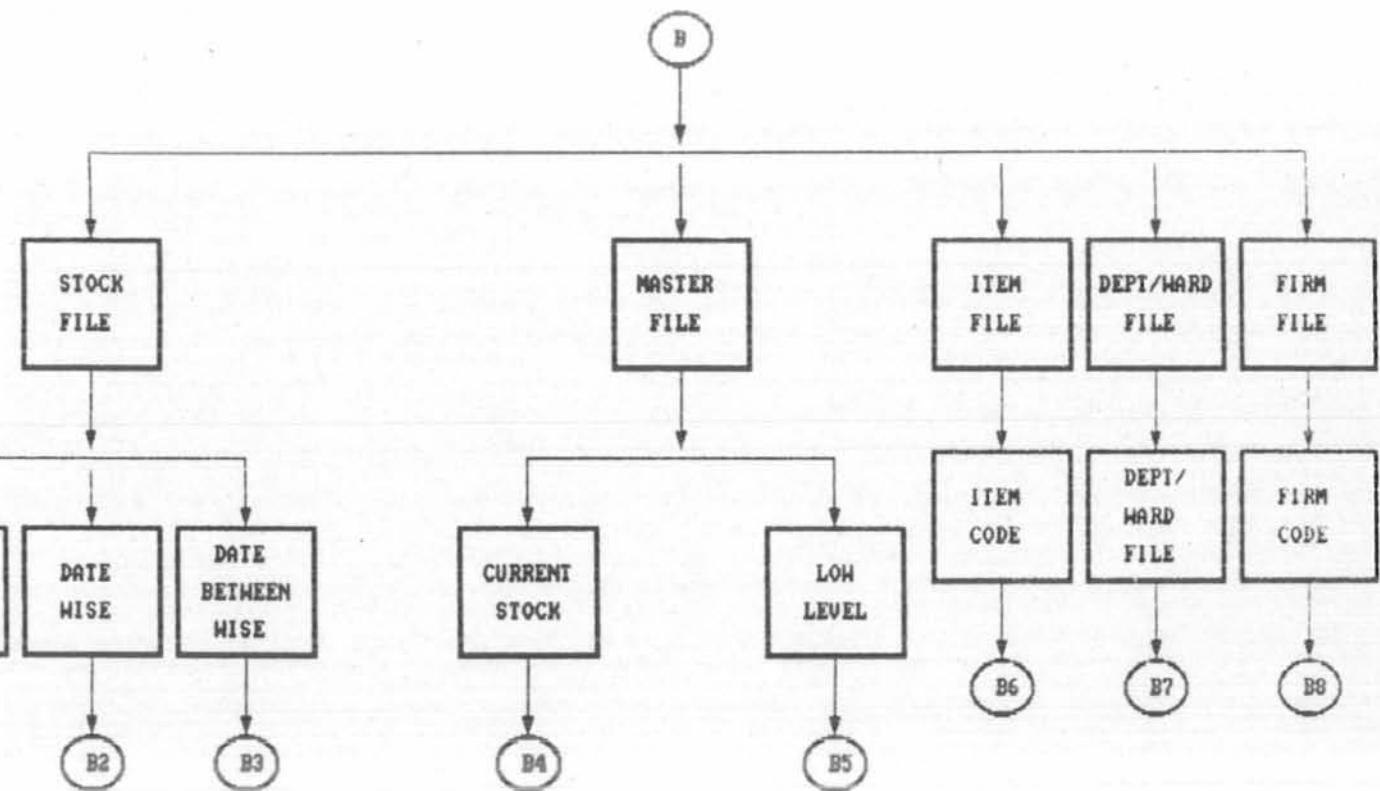
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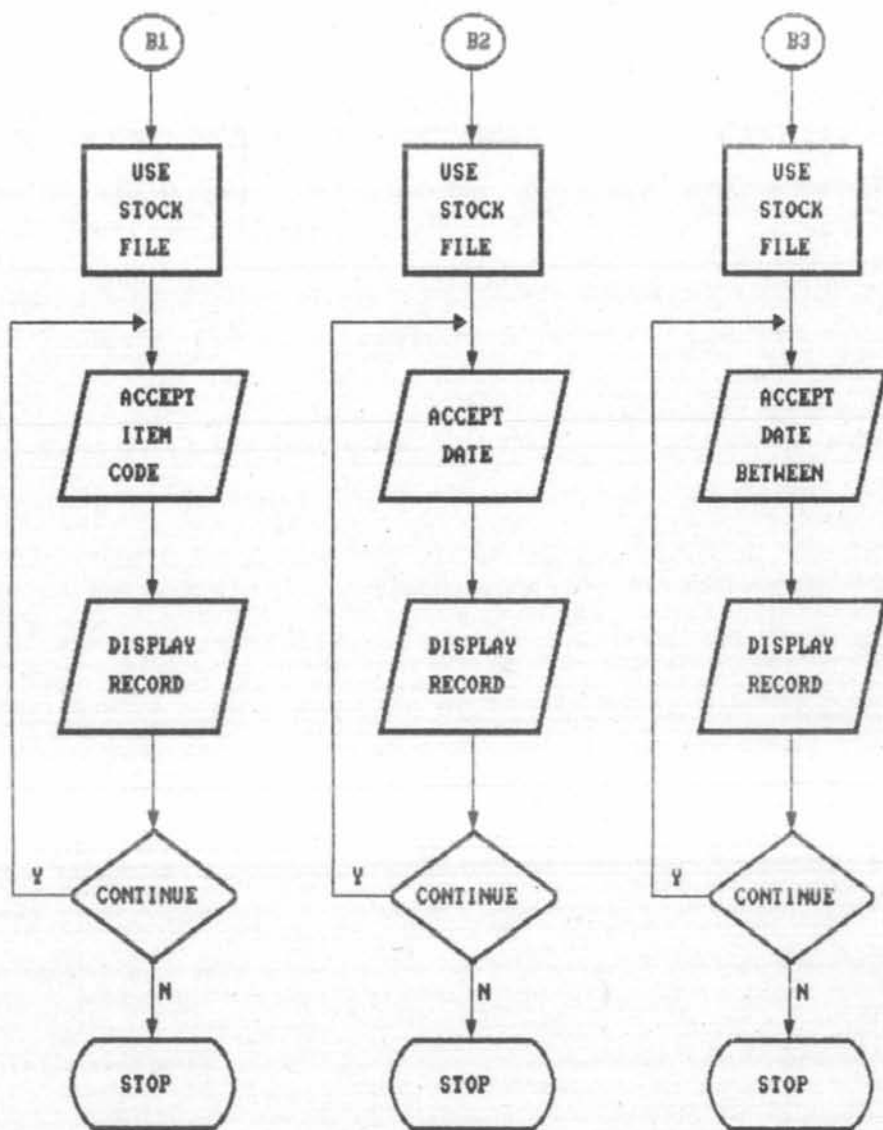
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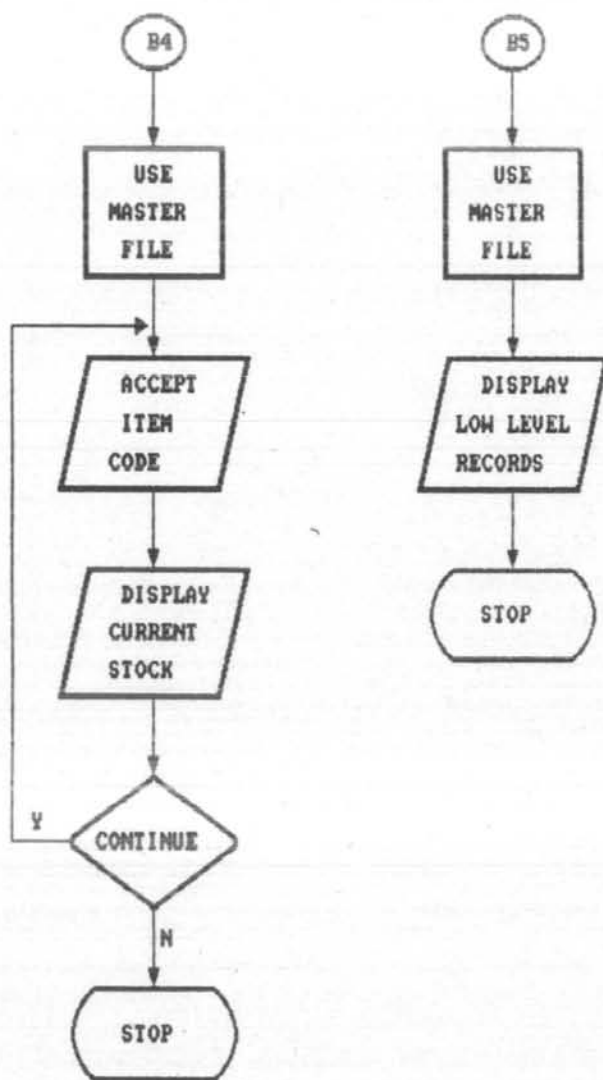
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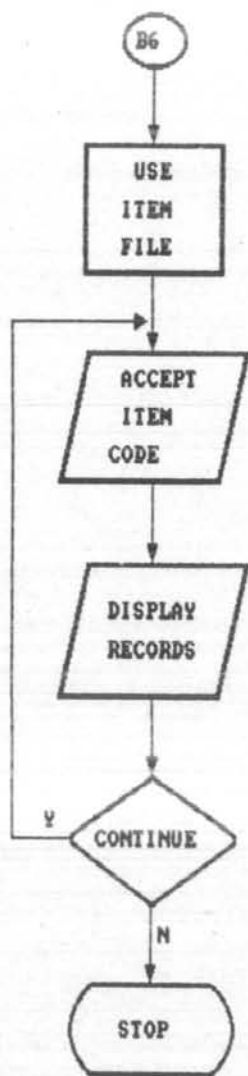
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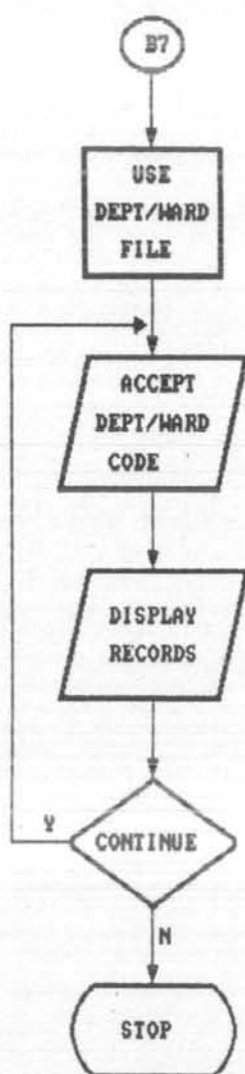
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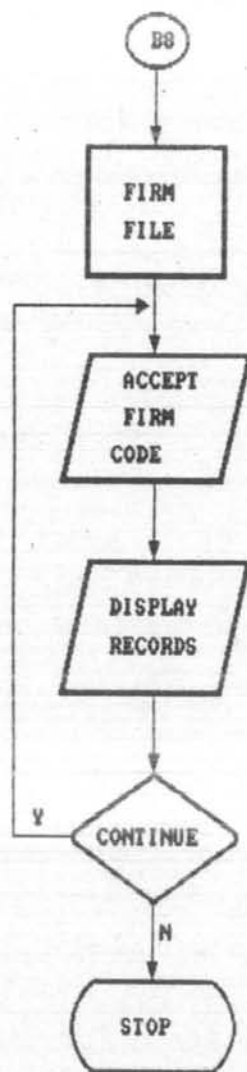
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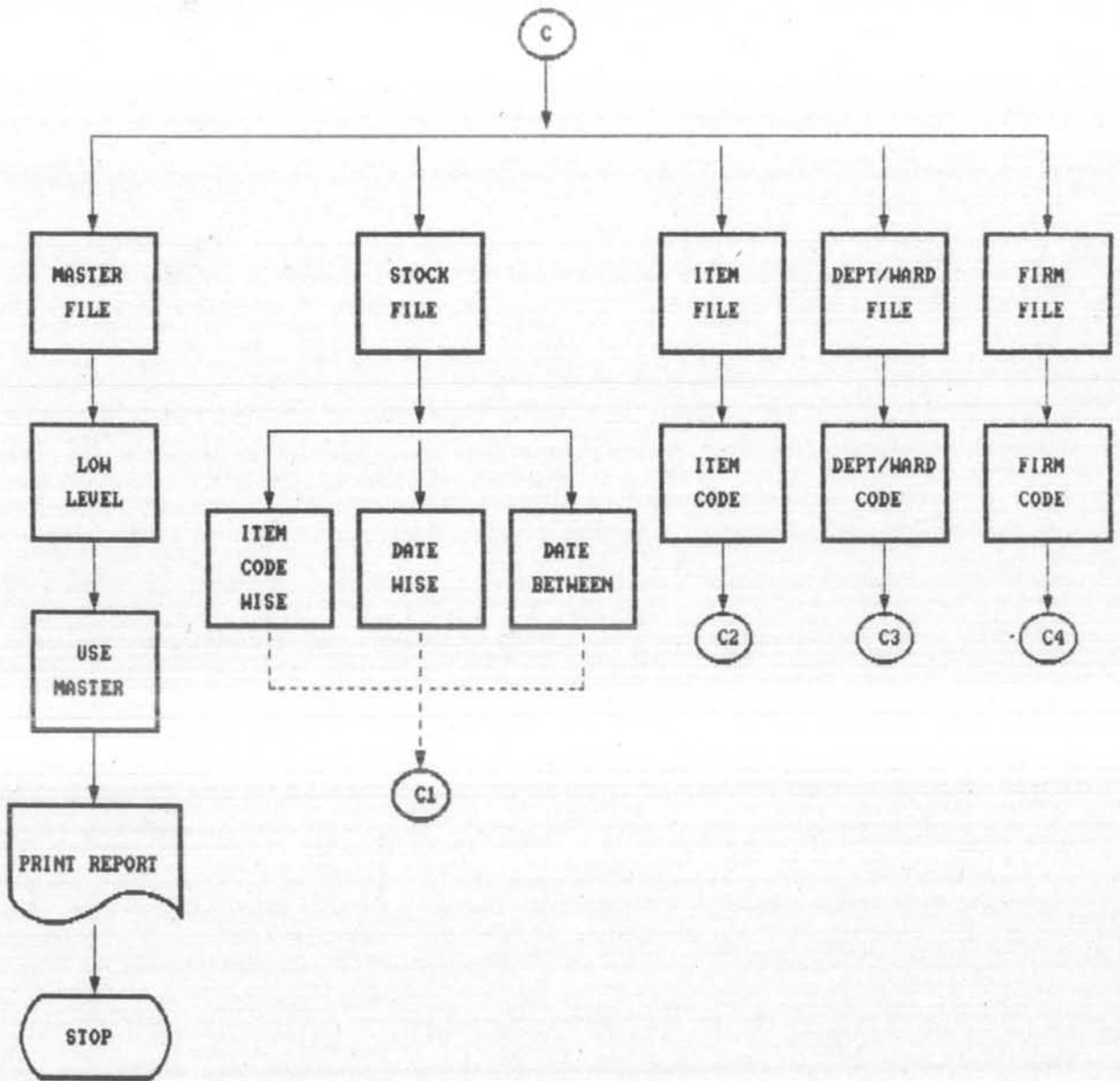
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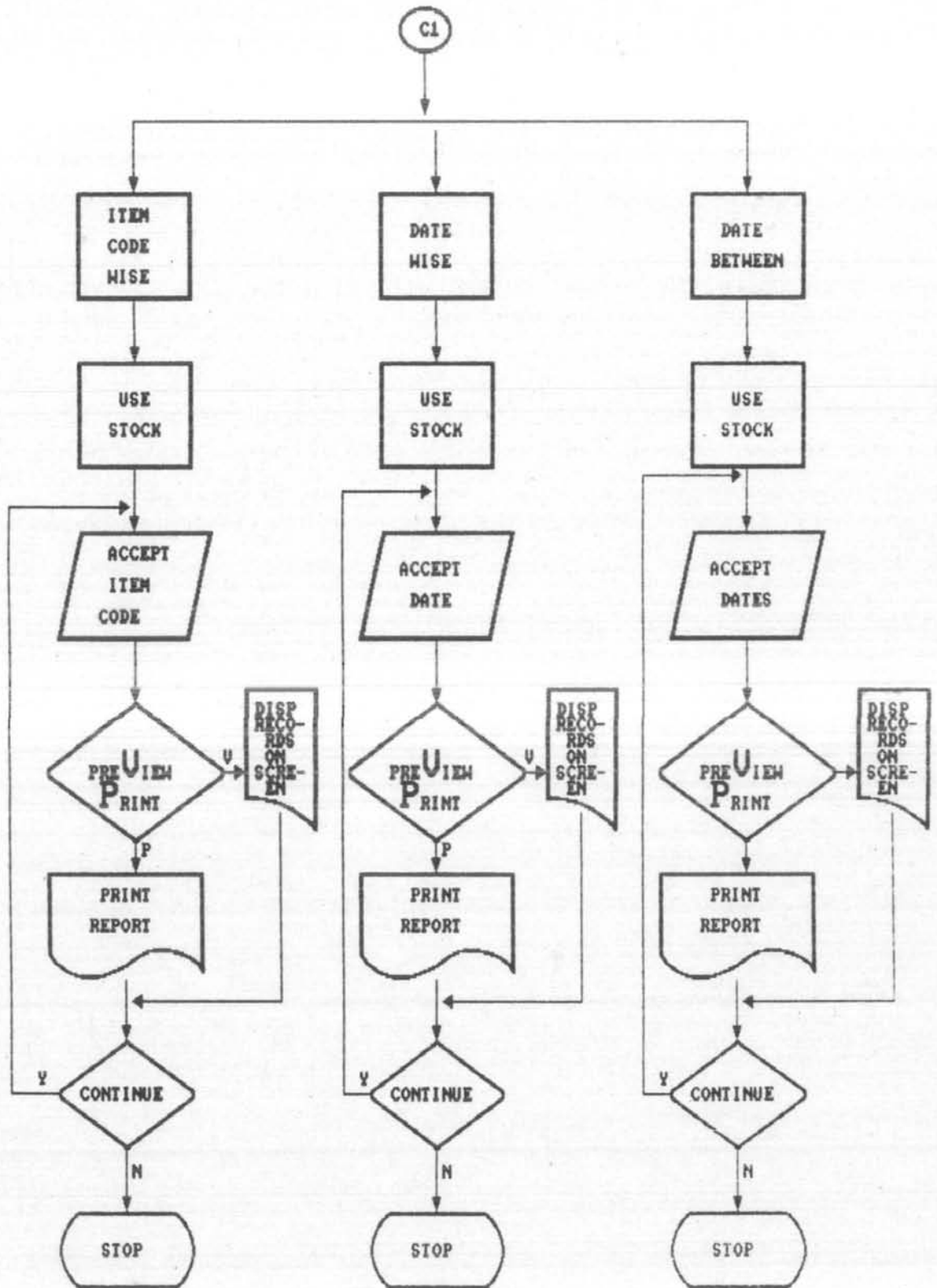
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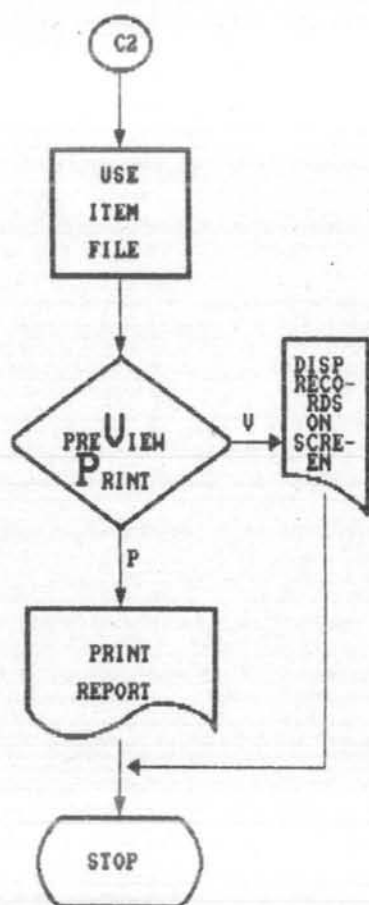
PRINT REPORTS



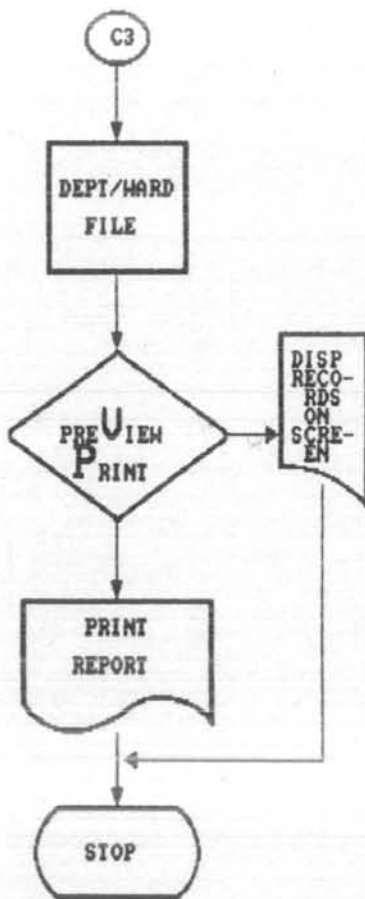
PRINT REPORT FROM STOCK FILE



PRINT REPORT FROM ITEM FILE



PRINT REPORT FROM DEPARTMENT/WARD FILE



PRINT REPORT FROM FIRM FILE

