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COMPUTERIZATION
of
POL SECTION
of

DR. A.Q. KHAN RESEARCH LABORATORIES KAHUTA

SUBMITTED BY

AHMED NAWAZ KHAN NIAZI

SUPERVISED BY

JAVED HUSSAIN

**COURSE COORDINATOR
Q.A.U. ISLAMABAD**



**COMPUTER CENTER
QUAID-I-AZAM UNIVERSITY,
ISLAMABAD**

SEPTEMBER 2000.

**IN THE NAME ALLAH,
THE MOST MERCIFUL,
THE MOST GRACIOUS.**

DEDICATED TO:

MY PARENTS

WHO EVER PRAY FOR MY SUCCESS.



ACKNOWLEDGEMENT

First of all, I thank Allah, the most gracious and completion this project. It is his blessings and kindness always solicited at ever step of completion of this project. It is his blessing and kindness, which guided us through desk and tough period.

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Ahmed Nawaz Khan Niazi

**COMPUTER CENTER
QUAID-I-AZAM UNIVERSITY
ISLAMABAD**

Certified that have read thesis submitted by

AHMED NAWAZ KHAN NIAZI

And found it of sufficient standard to warrant its acceptance by the Quaid-i-Azam University for the Post Graduate Diploma in Computer Sciences.

COMMITTEE

1. External Examiner:
Name: _____

2. Supervisor:
Javed Hussain,
Course Coordinator,
Computer Center,
Quaid-i-Azam University. _____

3. Dr. Ghulam Muhammad
Director,
Computer Center,
Quaid-i-Azam University. _____

PROJECT BRIEF

PROJECT TITLE	COPUTERIZATION OF POL SECTION DR. A.Q.KHAN RESEARCH LABORATORIES KAHUTA
UNDERTAKEN BY	AHMED NAWAZ KHAN NIAZI
SUPERVISED BY	JAVED HUSSAIN COMPUTER CENTER, QUAID-I-AZAM UNIVERSITY.
OBJECTIVE	TO AUTOMATE THE POL SYSTEM OF DR. A.Q. KHAN RESEARCH LABORATORIES
DATE OF COMMENCEMENT	JUNE 2000
SOURCE LAGUAGE	ORACLE/DEVELOPER 2000
OPERATION SYSTEM	WINDOWS 95
SYSTEM USED	PENTIUM IBM COMPATIBLE.

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CHAPTER 1

PROJECT DEFINITION

CHAPTER 1 PROJECT DEFINITION

1.1 THE IMPETUS FOR CHANGE

In almost all the advanced countries 'COMPUTER' is playing a significant role in almost every sphere of life. It is not only used in the field of science but also in commercial fields. It has shown its significance in certain fields where its existence seemed impossible. Developing countries like Pakistan are exploring the enormous powers of this machine. There is a great urge of modernization and computer is making its way through many fields.

MT Division (Mechanical Transport Division) is a large division with a vast network. POL (Petrol Oil and Lubricants) section controls its all POL requirement throughout the organization. The staff at POL section faces hardship in completing all its work and at the same time prepares different reports for the management that they needs from time to time. Management of MT Division decided it to be essential to computerize the POL section so that:

- The burden on POL Officer shall be reduced.
- Management can get their reports quickly.
- Reports that the management wants can be more refined.

So the project is defined as under:

1.2 COMPUTERIZATION OF POL SECTION

So we can say that the impetus for change is from an internal source.

1.3 SCOPE OF THE PROJECT

Scope of the project is to design build and implement an information system for the POL section of MT Division. It would deal with every kind of information regarding POL section, certain reports which the management needs, answer online queries and provides an efficient method of storage and retrieval.

1.4 OBJECTIVES OF THE PROJECT

Presently system is functioning manually, which is time consuming, uneconomical, and not very much accurate.

The objective of the new system will be as follow:

- To computerize the POL system of MT Division.
- To provide reports on time and easily.
- To entertain online queries.
- To reduce time involved in present manual system.
- The new system should be accurate.
- To provide user-friendly interface.

CHAPTER 2

INTRODUCTION TO POL SYSTEM

CHAPTER 2 INTRODUCTION TO POL SYSTEM

2.1 RESPONSIBILITIES OF POL SECTION

POL section is responsible for performing various duties. The classification of its role is as follows.

- POL and its administrative control.
- Calculation of KMPL for each vehicle.
- Issuing explanation letters to low KMPL vehicle's driver.

POL section demands for drafts to its division headquarter for taking POL from Govt. depot. After receiving draft supervisors bring POL from sehala depot. Petrol pump issue petrol/diesel to their vehicles and issue coupon to every vehicle of quantity that it takes. Driver P/No. Is also noted on the coupon. A copy of this coupon is also sent to POL section. Which calculates the Kilometers traveled in one Litter (KMPL). This figure is compared with the fixed KMPL of that vehicle which had provided by the workshop section of MT division. If calculated KMPL is less then the fixed KMPL then an explanation letter is issue to that driver. If reasons given by the driver for this low KMPL is satisfactory then this is justify otherwise driver is fined.

Present system is manual and suffers Varity of problems which shall be discussed later.

2.2 EXISTING SYSTEM

2.2.1 INTRODUCTION

The process of study the existing system is to see how it operates and where improvements can be made is of paramount importance for design and development of an efficient and well_designed system.

It is only possible to present a practicable solution after thought knowledge of the working of existing system. Incorrect or incomplete information and understanding of the existing system can lead to design errors in the new system. As a result of which the newly developed system may not be able to

present a solution of the shortcomings already present in the existing system and cope with the future requirements of the system. Thus only after the existing system is understood, it is possible to analyze it and assemble recommendations for system design.

A detailed description of the study at POL section office is given in the following section.

2.2.2 INFORMATION

Information can be regarded both as a process and as an output of that process. In an organization setting, the former definition refers to the 'INFORMATION PROCESSING FUNCTION' while the later definition refers to the use of information in facilitating operations and management i.e. a 'FUNCTIONAL FUNCTION'.

2.2.3 SYSTEM

A system is defined as some on going process of a set of two or more elements, such as people, machines and concepts that are united together to attain a common objective. A system may consist of a number of smaller systems, which are called as 'SUB_SYSTEM'.

2.3 INFORMATION SYSTEM

It is the combination of human and computer based resources, which results in the collection, storage, retrieval, communication and use of data for the purpose of efficient management of operations in organization.

2.4 POL INFORMATION SYSTEM

A POL system is concerned with the flow of information about movement of vehicle and consumption of POL. It provides a systematic way to the management for retrieving information and taking decision on the base of retrieved information.

2.5 STUDY OF EXISTING SYSTEM

Transport Division has approximately one thousand vehicles of different make and type. MT Division has to keep a record of whereabouts of each vehicle. They also have to know the consumption of petrol and diesel and want to check the KMPL of each vehicle at the end of each month. If some vehicle is giving low KMPL then the fixed KMPL. Then this vehicle is sent to workshop for refixation of KMPL. This division also wants to know the oil consumption of each vehicle. If some vehicle starts using more oil then its limitation. Then engine of this vehicle is checked by the workshop and report is sent to higher authorities that make decision to either dispose off the vehicle through public auction or overhaul the engine for future use.

POL section has one incharge and three supervisors. One supervisor is detained on petrol pump who has eight junior staff members. Their duties are given below.

- Making demand of draft
- Bringing POL from Govt. Depot.
- Issuing petrol & diesel to each vehicle.
- Sending copy of coupon to POL section Office.
- Make monthly statement of petrol and diesel.

Second supervisor detained on oil station with seven junior staff members whose duties are given below.

- Check oil of the vehicle is to change or not
- Issue proper quantity of specific oil.
- Prepare daily state of oil
- Prepare monthly statement of oil
- Demanding for draft
- Bring oil from local MT division Store

Third supervisor is detained in office that has 5 junior staff members. Their duties are given below.

- Make total of each vehicle petrol/diesel issue during previous month.
- Calculate total running during last month
- Calculate KMPL for each vehicle.

- Compare with fixed KMPL.
- Issue explanation letters
- Writing to workshop for refixation of KMPL of certain vehicle.

Present system is well-organized manual system. Each vehicle has a register that is called VDRA (Vehicle Daily Running Audit). In this register daily running of vehicle, natures of duty and fuel entries are written. Fuel coupons are issued from petrol pump. And quantity is entered in VDRA by petrol pump supervisor.

After a certain period and also if management needs some report it is given to them by consulting these VDRA and pol registers. There is also a small system developed in lotus 1-2-3 but it is not well organized and user friendly. One has to search it for his required information.

2.6 WORKING OF PRESENT SYSTEM

As mentioned above, there are approximately one thousand vehicles in MT division. This division has one Petrol pump and one Oil station. There is a fuel book of each vehicle on petrol pump. When vehicle comes to draw fuel its fuel tank is fill up to full level. And quantity of fuel drawn is entered in its VDRA and a slip of this much quantity is made from the book of this vehicle. This slip has three coupon one coupon is issue to driver of that vehicle, second is sent to POL office and third is kept on petrol pump record. Each coupon contains following details.

- Registration number
- Coupon number.
- Date
- Fuel quantity in liters
- Driver's P.NO.
- Driver's name

- Present meter of vehicle.
- Signature of driver.

These coupon helps in preparing following reports.

- Daily issue report of petrol/diesel on petrol pump.
- Monthly issue report of petrol/diesel.

In POL office there is a POL register of each vehicle. The entries of these coupons are made in their relevant register. At the end of month, totaled the quantity of fuel drawn by vehicle during this month. Running of vehicle during this month is also calculated. After this average KMPL (Kilometer per litter) of whole month is calculated and compare with fixed KMPL of this vehicle given by the workshop section. If calculated KMPL is less then the fixed KMPL then explanation letter is issued to the driver of that vehicle. If reply of this explanation is not satisfactory then driver is fined. If some vehicle gives low KMPL for three consecutive months then that vehicle is sent to workshop section for refixation of KMPL.

Second phase of the project is lubricants. This division has different kind of vehicles that uses different kind of oil. Workshop section issues a certificate to each vehicle that has following entries.

- 1 Type of oil.
- 2 Oil capacity with filter.
- 3 Oil capacity with out filter.
- 4 Number of kilometer after that oil will be changed.

Copy of this certificate is pasted in VDRA of that vehicle. Oil station supervisor receives oil from the store of MT division. And issue the oil to the vehicles according to its certificate and made entry of oil in 'OIL CHANING SECTION' of VDRA of vehicle.

He enters the following entries.

- 1 Date
- 2 Present meter reading.
- 3 Quantity issue.
- 4 Driver name & P.No.

He also made these entries with registration in daily issue oil register on oil station. From this register he made entries in ledger and prepares daily/monthly issue reports.

2.7 DRAWBACKS OF EXISTING SYSTEM

Major drawbacks of the present system is as follows:

2.7.1 EFFICIENCY

Efficiency of the system is minimum. Proper information is not available to the management. Retrieval of information is very slow.

2.7.2 TIME FACTOR

Manual system is time consuming and labor-some depriving organization of precious working hours that can be used somewhere else.

2.7.3 DECISION-MAKING

It has been observed that a slow retrieval of information makes it difficult for the management to take decision. A computerized approach makes access to information easier resulting in a better position to take decisions.

2.7.4 ANALYSIS OF EXISTING SYSTEM

The present system is analyzed on the following basis.

- 1 What is existing system?
- 2 What type of problems the management is faced.
- 3 How these difficulties be removed.

CHAPTER 3

PROPOSED SYSTEM

CHAPTER: 3 THE PROPOSED SYSTEM

3.1 INTRODUCTION

The computer has brought revolution not in the field of science but also in every field of human endeavor, the computer has to handle large volume of data and perform routines and procedures constantly. Computerization of a system involves study of the present system in depth along with all its weakness and drawbacks, suggesting a suitable computer system implementing the new system and then looking into its proper functioning.

After analyzing the existing POL system and its drawbacks a new system has been proposed which will fulfill the requirements of organization, so it is necessary to remove the problems from the existing system and give a reasonable solution for problem encountered the organization. This chapter explains the objectives of the proposed system. How it differs from the existing system, what are the inputs and outputs of the system and which we use hardware and software.

3.2 OBJECTIVES OF PROPOSED SYSTEM

A PC based POL system has been proposed. It is a user friendly database. It will fulfill the requirements of the organization user and satisfies the user's requirements. It will provide required documents such as various reports efficiently provide the information to management and would help them in decisions making.

The objectives of the new system must be established before designing the system, keeping in mind the drawbacks, of the existing system, the objectives of proposed system are as follows.

- i. It will be more efficient than the existing system.
- ii. The system will have an integrated environment so that it provides a platform where the system could be accessed.
- iii. The present system does not have validation checks while in proposed system there will be validation checks. The validation checks in the proposed system are in the form.

- (a) Item level
 - (b) Block level
 - (c) Form level
- iv. POL receipts will be provided for correct data entry.
 - v. The proposed system will generate a number of reports, which are not available in existing system.
 - vi. The proposed system will be comprehensive database, which provides insertion, deletion, accession updating etc. each file.
 - vii. In the proposed system, facilities will be provided.
 - viii. It will be a users friendly system.
 - ix. It should be flexible to cope with future changes.
 - x. It will provide the management accurate information in order to help in their decisions making processes.
 - xi. Data protection will be enforced against unauthorized uses.

3.3 SPECIFICATION OF INPUTS

There are various inputs that are classified according to their mode of entry in the database

a) Constant inputs:

Some inputs remain constant in the system during the working. For example, all codes inputs are constant because they are entered initially when the system is installed, codes would never changed after entry.

b) Variable inputs:

Some input change each time.

- i. General information for each new
- ii. General information for transaction.
- iii. Information for new

c) **CONDITIONAL INPUTS**

There are some inputs that depend upon the inputs of some other fields. These inputs are called conditional inputs. All kinds of inputs would be made through screen.

3.3.1 USER INTERFACE

For efficient user interaction, screens will be designed to keep data entry, updating and deletion simple and easy for the user. These screens will clearly tell the user what to do and how to perform a particular function. Data will be accepted in similar manner as it is done manually.

3.3.2 ON-LINE HELP

The system will provide full on line help to the user, so that the User can use the system easily. The proposed system will be completely user friendly with appropriate messages. Which will indicate a wrong input or any other error.

3.3.3 UPDATION

Any mistake detected or any other necessary updating can easily be made through updating operation. User may change of value of any field having privilege for updating. If record does not exist then system should give an error message.

3.3.4 DELETION

Facility of deletion of particular records from database is also provided if so required. Different SQL queries would provide deletion facility. Only the responsible person would have the privilege for deleting records, which are necessary.

3.4 SPECIFICATION OF OUTPUT

The outputs of the system are in form reports on paper and queries to be displayed on the screen.

a) **Queries:**

One major purpose of establishing a database is to retrieve information quickly and efficiently. Queries are the statements that retrieve information on the screen in any combination that are the fields of different tables those are interlinked and used to display data on the screen.

Queries in the proposed system are provided keeping in mind the question that may arise in the user's mind regarding retrieval of desired information from the system.

b) **Reports:**

Reports is also the form of query that is printed on the paper. The reports produced by the proposed system have to be well formatted, detailed and according to the user requirements. The report will also be helpful for the management.

3.5 SOFTWARE SELECTION

One of the most important tasks after the system requirements are known, is determining whether particular software is capable of meeting the system requirements. For those that do so further security is needed to determine their desirability in comparison with other condition.

Information system in 1960's was dominated by file system, however, from the early 1970's organization have been gradually moving to database system due to the following reasons.

- 1) Database systems make it possible to keep large volume of data available in an up to date form. As the complexity of the data and application grow, complete relationship among data need to be modeled and maintained. DBMS are capable of providing this facility to create relationship. So it is very important to create relationship among data structures.
- 2) DBMS provide easy consolidation resources in an organization.

- 3) File system is not at all suitable for adhere retrieval of data and querying the database from aspects, views (Logical representation of data) are provided by most.

DBMS solve this problem. Keeping these facts in view a database management system of some kind was considered best option against the conventional file system for developing the proposed system.

- 4) The choice of DBMS is governed by a number of factors are technical, other are economical. The technical factors are concerned with a suitability of the database management system for the task at hand. Issue to consider here is the type of DBMS (Relational, network, hierarchical). After studying the characteristics of supports, the type of user interface, the type of high level query language available, it was decided to use the relational database management systems available these days.

ORACLE was selected. The major features that resulted in the selection of ORACLE for the development of applications are as follows.

FEATURES OF ORACLE

- 1) The most important feature of ORACLE is that it is multi user software. The applications developed in ORACLE could be connected together into a powerful, distributed database environment.
- 2) It provides a powerful client/server relationship between the server and its terminal. In client/server relationship part of the processing is performed the server while part of it is performed at the user's terminals thus causing a considerable increase in the speed of processing.
- 3) ORACLE provides strict security of applications developed in the package by enforcing user names and passwords. Without the password it is not possible for any body to access the system. Also it is possible to grant different type of accesses to different users e.g. updation, addition or deletion rights may be

provided only to selected personnel while the rest may be allowed to view the records.

- 4) ORACLE (DEVELOPER/2000) provides a number of sophisticated tools for the Development of applications. Some of these tools are given as:
 - a) **SQL*Plus**

SQL*Plus is an interface through which SQL commands may be entered and executed. There are a number of SQL commands which can further process and format the output from one SQL command, and provide facilities for editing and saving SQL commands.
 - b) **ORACLE Forms**

ORACLE forms provide facility to design forms. These forms provide fast and easy data entry, updation, deletion and queries to on ORACLE database.
 - c) **ORACLE Menu**

ORACLE menu is used to convert users friendly menus interfaces to any software application.
 - d) **ORACLE Report Writer**

ORACLE Report writer can be used to create an ordinary letter or tabular report. It can be used to produce a report derived from a single ORACLE table, with column headings, columns of database information, and totals as desired.
- 5) A number of other utilities are also available which allow easy manipulation along with the data stored in these structures. For example ORACLE provides import/export utilities with the help of which it is possible to move structure along with data contained in these files from one to another.
- 6) The ORACLE RDBMS is fully portable over 80 distinct hardware and operating system platform, including VMS, MSV, UNIX, MS-DOS, OS/2, MACINTOSH. ORACLE's unrivaled portability and connectability enable all the system in an organization to be linked into a single, integrated computing resource.

- 7) ORACLE provides a powerful procedural language extension to SQL. Known as PL/SQL, it significantly increases application performance and developer productivity, while enhancing the power and functionality of other ORACLE products.
- 8) The ORACLE's pre-compilers make it possible to embed SQL in programs written in C, ADA, COBOL, FORTRAN, PASCAL and PL/I.

3.6 HARDWARE CONSIDERATION

IBM 200 MMX machine was used for the development of the proposed system with Windows 95 operating system.

• Main Processor	Pentium 100
• Main memory	16 MB
• Hard Disk	2GB
• Dot Matrix Display Device	IMB SVGA Monitor
• Printer	80 Columns

CHAPTER 4

SYSTEM DESIGN

CHAPTER 4 SYSTEM DESIGN

4.1 INTRODUCTION

System design is an important phase in the system life cycle. The new system is designed keeping in view the conditions imposed by the organization and to avoid the drawbacks, which are, have found in the existing system. To design a system, which would meet the requirements of the organization. The designed system should consist of complete and clearly out lined specifications that state what the software should do. There should be no aunbigaity. Before development of any system, it is very important to sketch specifications and with the help of these specifications, thorough analysis is carried out which helps in drawing the detailed design which should consist of the input form output reports, query formats and layouts of all database files and their relationship. The procedures and functions to be developed are also included in the detailed design. There are many factors, which should be taken in consideration in the design such as economical factor, reliability, responsiveness and modularity.

4.2 INPUT DESIGN

Input design specifies the manner in which data enters the system for processing. An accurate and effective input design ensures the reliability of the system otherwise output may be erroneous. Data is checked at the input stage to prevent incorrect data to creep in e.g. primary cent's is the key field so that it should not be duplicated, similarly characters should not be accepted is numeric fields and vice-versa so checks are provided for validation.

Input design involves the following steps.

1. CODE DESIGN
2. SCREEN DESIGN

4.2.1 CODE DESIGN

A code is an abbreviation of the actual data, which occupies less space since the user has to enter only the code instead of the whole field. Using codes, Data retrieval becomes fast and easy. In the designed system codes are entered in a user-friendly manner. For a field having large number of choices actual codes will not be entered by the user but instead a choice listed is used. He needs only to select the required value with the help of arrow keys (Only up word & down word) and then press the return key. This approach is adopted to avoid confusion in the data entry for the fields, which have fixed values.

The following codes are used in the system.

4.2.1.1 SPECIAL INSTRUCTIONS CODES

It is a one byte character code, which represents special instructions in data entry of invoices for updation of pump file.

Codes	Fuel Type
P	Petrol
D	Diesel

4.2.1.2 CODES USED FOR OIL FILE

These codes are used for updation of Oil file.

Codes	Oil Type
G	GTX
C	CRD40
N	GTX TIN
R	REMOLA
T	TOTAL

4.2.1.3 CODES USED IN OIL FILE

These codes are used for issuing oil to the vehicles and updation of balance.

Code	Oil With/Without Filter
O	Without Oil Filter
W	With Oil Filter

4.2.1.4 SCREEN DESIGN

The screen were designed in such a way that the input process is clear, data input is accurate, easy to use and it provides appropriate help and error message to the user.

Input design is concerned with data formats and data length and type of each field were determined. Keeping in mind that no memory should be wasted. It is the responsibility of the programmer to check the accuracy of the data entry. During the data entry, that the user can have the knowledge of what he has to enter.

4.2.1.5 PASS WORD

Passwords are implemented for security purposes whenever a user wants to logs in, he/she will provide his identification by typing the password. If the given password matches with the registered password, then user will be able to enter the data in the forms. It will also the user to make modification, deletion or posting data to the master file. In Oracle the items in SQL*MENU provide these type of securities by defining ROLE in system of manager identification.

4.2.1.6 LIST OF VALUES

When a system is designed on the basis of Oracle, then a facility is provided from Oracle, which is LOV's. By using this facility, we will be

able to enter the data specially Registration Number of vehicle from the master file into other tables. When we reach that item in a table LOV's of Registration Number is open by pressing a key F9. Now with the help of arrow Keys we choose one of them and the press <Enter> or with the help of mouse. In this way we will be able to enter a correct Registration Number of vehicle or we will be able to enter the Registration Number of the vehicle will belong to this organization only. We use list of values from the supporting table commonly.

For example the lists of values for Registration Number of vehicle.

Registration Number
RIP-7011
RIP-7013
RIP-7013

4.3 OUTPUT DESIGN

The ultimate result of the pains taking efforts of the system analyst can be seriously undermined. If the output produced by the system is not up to the mark. For the system to be successfully implemented the output must be according to the requirements of the organization.

4.3.1 PRINTED OUTPUT

Reports are generally used by the management and are mostly generative in screen form as well as in printed form. The reports of the proposed system are arranged so that they are meaningful, informative and easy to understand.

Two types of reports are provided is the designed system.

4.3.1.1 SCREEN REPORTS

There are following reports, which the proposed system contains.

1. Report of daily issue of Petrol.

2. Report of daily issue of Diesel.
3. Report of Petrol/Diesel ledger balance.
4. Report of daily issue Oil.
5. Report of Oil ledger balance.
6. Report of KMPL of vehicles.
7. Report of fuel drawn by the vehicle.
8. Report of fuel drawn by the vehicle with driver name.
9. Report of Petrol/Diesel purchased.
10. Report of Lubricants purchased.

4.3.1.2 PRINTED REPORTS

1. Report of petrol/Diesel purchased.
2. Report of Lubricants purchased.
3. Report of fuel drawn by vehicle.
4. Report of oil issued in a day.
5. Report of petrol/Diesel ledger balance.
6. Report of Oil ledger balance

4.4 FILE DESIGN

After designing the inputs and outputs, the next stage is to store data in the form of files well-designed files will result in.

1. Substantial saving of storage.
2. Minimize data redundancy.
3. Minimize inconsistency.

To provide these features and to overcome these problems. NORMALIZATION techniques are used.

STRUCTURE OF THE DATA BASE

4.4.2 Vehicle File

This file contains information about vehicle.

FILE NAME: VEHICLE

PRIMARY KEY: REGD

RECORD LAYOUT

FIELD NAME	TYPE	LENGH	CONSTRAINT	DESCRIPTION
Regd	Char	8	Not Null	Vehicle Registered Number
Maker	Char	20	Not Null	Maker Name
Make	Char	14	Not Null	Make of Vehicle
Code	Char	3	Not Null	Vehicle Code
Horse	Char	7	---	Horse Power
Type	Char	12	Not Null	Type of Vehicle
Model	Num	4	---	Model of Vehicle
Engine	Char	20	Not Null	Engine Number
Chassis	Char	20	Not Null	Chassis Number
Seating	Num	2	---	Seating Capacity
Cylinder	Num	2	---	Number of Cylinder
Battry	Char	22	---	Battery Type/Quantity
Tank	Num	3	Not Null	Fuel Tank Capacity
DOR	Date	-	Not Null	Date of Receive
Milage	Num	6	---	Mileage

4.4.3 Fuel File

This file contains information about fuel.

FILE NAME: FUEL

PRIMARY KEY: REGD

RECORD LAYOUT

FIELD NAME	TYPE	LENGH	CONSTRAINT	DESCRIPTION
Regd	Char	8	Not Null	Vehicle Registered Number
Fdate	Date	-	Not Null	Fuel Date
MakeCoupn	Num	7	Not Null	Fuel Coupon Number
Metter	Num	6	Not Null	Meter Reading of Vehicle
Fuel	Num	3	Not Null	Fuel Drawn

4.4.4 Duty File

This file contains information about duty of vehicle.

FILE NAME: Duty

PRIMARY KEY: REGD

RECORD LAYOUT

FIELD NAME	TYPE	LENGH	CONSTRAINT	DESCRIPTION
Regd	Char	8	Not Null	Vehicle Registered Number
PNO	Char	5	---	Personal Number of Driver

4.4.5 Vcode File

This file contains information about vehicle code.

FILE NAME: VCODE

PRIMARY KEY: REGD

RECORD LAYOUT

FIELD NAME	TYPE	LENGH	CONSTRAINT	DESCRIPTION
Regd	Char	8	Not Null	Vehicle Registered Number
Fcode	Char	1	Not Null	Fuel Code
Ocode	Char	1	Not Null	Oil Code

4.4.6 Driver File

This file contains information about driver.

FILE NAME: DRIVER

PRIMARY KEY: PNO

RECORD LAYOUT

FIELD NAME	TYPE	LENGH	CONSTRAINT	DESCRIPTION
Pno	Char	5	Not Null	Personal Number of Driver
Name	Char	25	Not Null	Name of Driver
Stat	Char	8	---	Status
Desg	Char	8	Not Null	Designation
Acad	Char	10	---	Academic Record
DOB	Date	-	Not Null	Date of Birth
DOA	Date	-	Not Null	Date of Appointment
Scale	Char	6	---	Pay Scale
Address	Char	50	---	Address

4.4.7 MPG File

This file contains information about Mileage Per Gallon.

FILE NAME: MPG

PRIMARY KEY: REGD

RECORD LAYOUT

FIELD NAME	TYPE	LENGH	CONSTRAINT	DESCRIPTION
Regd	Char	8	Not Null	Vehicle Registered Number
Mdate	Date	-	Not Null	Date
MPG	Num	2, 2	Not Null	Mileage Per Gallon
PNO	Char	5	---	Driver's Personal Number

4.4.8 Invoice File

This file contains information about Invoice.

FILE NAME: INVOICE

PRIMARY KEY: IDATE

RECORD LAYOUT

FIELD NAME	TYPE	LENGH	CONSTRAINT	DESCRIPTION
Invoice#	Char	8	Not Null	Invoice Number
Idate	Date	-	Not Null	Invoice Date
Icode	Char	1	Not Null	Invoice Code
Draft#	Char	7	---	Bank Draft Number
Qty	Num	7, 2	Not Null	Quantity of POL

4.4.9 Pump File

This file contains information about Issue Petrol/Diesel from Petrol Pump.

FILE NAME: PUMP

PRIMARY KEY: PDATE

RECORD LAYOUT

FIELD NAME	TYPE	LENGH	CONSTRAINT	DESCRIPTION
Pdate	Date	-	Not Null	Date of Drawn
Petrol	Num	7, 2	Not Null	Petrol Drawn
Diesel	Num	7, 2	Not Null	Diesel Drawn

4.4.10 Oil File

This file contains information about Issue of Oil.

FILE NAME: OIL

PRIMARY KEY: ODATE

RECORD LAYOUT

FIELD NAME	TYPE	LENGH	CONSTRAINT	DESCRIPTION
Odate	Date	-	Not Null	Oil issue date
GTX	Num	7, 2	---	GTX Oil
CRD40	Num	7, 2	---	CRD40 Oil
GTXTN	Num	7, 2	---	GTXTN Oil
Deolo	Num	7, 2	---	Deolo Oil

4.4.11 Oilcap File

This file contains information about Oil Capacity.

FILE NAME: OILCAP

PRIMARY KEY: Regd

RECORD LAYOUT

FIELD NAME	TYPE	LENGH	CONSTRAINT	DESCRIPTION
Regd	Char	8	Not Null	Vehicle Registered Number
Wofoil	Float	4, 2	Not Null	Oil capacity without oil Filter
Wfoil	Float	4, 2	Not Null	Oil capacity with oil Filter

4.4.12 Oilissue File

This file contains information about Issue of Oil.

FILE NAME: OILISSUE

PRIMARY KEY: REGD

RECORD LAYOUT

FIELD NAME	TYPE	LENGH	CONSTRAINT	DESCRIPTION
Regd	Char	8	Not Null	Vehicle Registered Number
Oidate	Date	-	Not Null	Date
Ocode	Char	1	Not Null	Code for With/Without Filter
Oil	Num	4, 2	Not Null	Oil Issued

CHAPTER 5

THE SYSTEM DEVELOPMENT

CHAPTER 5 THE SYSTEM DEVELOPMENT

5.1 INTRODUCTION

The system development phase comes after the system design. The software is developed to meet the proposed and designed specification of the system. The purpose of the development phase is to transform design into executable computer software, which may then be tested and implemented as a new system. In order to ensure the successful implementation of the system, the system analyst must perform certain tests and look on the different possibilities during this phase, the developed system is put into the actual operation.

5.2 SYSTEM DEVELOPMENT

The entire database has been developed by using SQL*PLUS, SQL*FORMS, SQL*REPORT, SQL*MENU and SQL*GRAPHS. By integrating these all aspects, complete software is developed. However it is necessary that we discuss some terminologies which are used in development.

5.2.1 SQL*FORMS

SQL*PLUS and SQL*FORMS are used insert, update, delete query the different tuples, SQL*FORM allows quick development of applications for entering, querying, updating and deleting the data. ORACLE SQL*FORMS engine provide many facilities making good screen painter. A field can be replaced anywhere in the screen by using screen painter as programmer wish SQL*PLUS is used mainly for the creation of tables and views. SQL*PLUS is an interface through which SQL commands may be entered and executed. There are a number of SQL commands which can further process and format the output from one SQL commands and provide facilities for saving and editing SQL commands. ORACLE forms provide facility to design forms. These forms provide easy and fast data entry, deletion, updating and queries to in ORACLE database.

5.2.2 BLOCK'S

A form may contain one more blocks. The blocks are the basic building of SQL*FORMS. A block contains a base table in which data is input, delete, query and update. It will be consisted on some base table when it is created by default. Each block is used to perform a specific task.

5.2.3 BASE TABLE

A base table is that data base in which a block is based. A block, which is associated with a table, contains the field of the base table. The table which created in SQL*PLUS contains same on it which restricts the input that is done SQL*PLUS or in SQL*FORMS.

5.2.4 SCREEN PAINTER

It provides facility to design the screen. By using this facility source fields are put according to user's wish. Actually it is full screen editor, in which one can quickly move fields around, add boxes other text and changing the text displayed for a field.

5.2.5 TRIGGERS

All triggers (Form level triggers, item level triggers and block level triggers) are written in PL/SQL, which is language, integrated with ORACLE database. Actually triggers are set of processing commands. Triggers are associated within SQL*FORMS. It can be fixed anywhere. An event is the operator pressing the key (EXIT). When this event occurs it is associated trigger e.g. Do-Key ('EXIT') fires executing the commands it contains.

5.2.6 MASTER DETAIL RELATIONSHIP

Master Detail Relationship is established between two blocks at form level. A record of the master block can have more than one topples in detail. Join condition field are automatically input to the detail block fields. When query the

block. Master detail relationship provides good interface in ORACLE. There is a primary to foreign key relationship between two fields.

5.2.7 ORACLE REPORTS

ORACLE reports is a feature rich reporting tool that produces production quality output using data sources such as the oracle database. Developers are able to embed graphic, sound, video and a wide assortment of visual aids is screen and hard copy output printed in ORACLE REPORTS the designer interface is mouse-driven.

5.3 INPUT FORM DESIGNING

SQL*FORMS developed form based applications for entering, querying, updating and deleting data. To develop the application quickly SQL*FORMS combine the instructions with information in the ORACLE data dictionary. The description of the data entry forms for the prepared system is discussed below.

There are following form which developed in my system

Form Name: Vehicle.fmb

Purpose: It contains the detail information of each vehicle belonging to this organization.

Form Detail

Block Name	Master Block	Description	Table Name
Vehicle	*****	Contain information about each vehicle.	Vehicle

Form Name: Employee.fmb

Purpose: It contains the bio data of each employee of this organization.

Form Detail

Block Name	Master Block	Description	Table Name
Employee	*****	Contains bio-data about each Employee.	Employee

Form Name: Duty.fmb

Purpose: It contains the information of drivers doing duty on the vehicle.

Form Detail

Block Name	Master Block	Description	Table Name
Duty	*****	Contains information about driver on the vehicle.	Duty

Form Name: Invoice.fmb

Purpose: It contains the detail information of Petrol, Diesel, and different kind of Oil purchased for vehicles.

Form Detail

Block Name	Master Block	Description	Table Name
invoice	*****	Contain information about purchased item.	Invoice

Form Name: Oilcap.fmb

Purpose: It contains the information about issuing quantity of oil to the vehicle.

Form Detail

Block Name	Master Block	Description	Table Name
Oilcap	*****	Quantity of Oil to be issued	Oilcap

Form Name: Oilissue.fmb

Purpose: It contains the detail information of oil Changing record of each vehicle belonging to this organization.

Form Detail

Block Name	Master Block	Description	Table Name
Oilissue	*****	Contains information about oil changing of vehicle.	oilissue

Form Name: Vcode.fmb

Purpose: It contains the information about the type of oil used, fuel type, and oil changing limit of each vehicle belonging to this organization.

Form Detail

Block Name	Master Block	Description	Table Name
Vcode	*****	Contains information about oil & fuel type use in each vehicle.	Vcode

Form Name: MPG.fmb

Purpose: It contains the information about the distance traveled by the vehicle in one litter of fuel.

Form Detail

Block Name	Master Block	Description	Table Name
MPG	*****	Contains KMPL of each vehicle	MPG

Form Name: Pump.fmb

Purpose: It contains the daily balance in under ground fuel tank at Petrol pump.

Form Detail

Block Name	Master Block	Description	Table Name
Pump	*****	Contains Fuel tanks Balance.	Pump

Form Name: Oil.fmb

Purpose: It contains the daily balance of different kind of oil in store.

Form Detail

Block Name	Master Block	Description	Table Name
Oil	*****	Contains daily balance of oil.	Oil

Form Name: Fuel.fmb

Purpose: It contains the information about the issuing of fuel to each vehicle.

Form Detail

Block Name	Master Block	Description	Table Name
Fuel	*****	Contains information about issuing of fuel.	Fuel

CHAPTER 6

SYSTEM TESTING & EVALUATION

CHAPTER 6 SYSTEM TESTING & EVALUATION

6.1 INTRODUCTION

System testing and implementation is the final phase of the system life cycle. In order to ensure the successful implementation of the system, the system analyst must perform certain tests. During this phase the developed system is put into the actual operation. The major components of this phase are the test plan and the conversion plan.

6.2 TESTING

The testing process focuses on the logical internals of the software assuring that all statements have been tested. It also focuses on the functional internals i.e. concluding tests to assure the defined input will produce actual results that agree with required results.

There are three levels of testing that are used to ensure that the developed system was performed in the following three steps.

1. Unit Testing
2. Integrated Testing
3. System Testing

6.2.1 UNIT TESTING

In unit testing different modules of the software were tested independently. The purpose of this testing is to determine that each module is functioning properly and to locate logical and coding errors that may be contained within a particular module e.g.

6.2.2 INTEGRATED TESTING

After successful unit level testing, integrated testing of all modules of the system was performed to ensure that all interfaces of the forms and the modules have been defined correctly and that correct forms are being invoked by different menu options. This was necessary, as the forms have been developed separately

from the application. It was also ensured that the different modules are integrating with each other correctly.

6.2.3 SYSTEM TESTING

System testing is performed to ensure that software is operating according to the desired specification and requirements of the organization. Testing and validation of results is very important to make the system acceptable. In the designed system, the size and structure of the data fields were checked while using the actual data. The main aim here was to determine the inconsistencies in the developed system. Hence the system software has been tested at system level.

6.3 SYSTEM CONVERSION

Conversion is the process of changing the form at of the old system to the new one. There are four basic conversion methods to implement a system.

1. Parallel Conversion
2. Pilot Conversion
3. Direct Conversion
4. Phase in Conversion
5. Proposed System Conversion

6.3.1 PARALLEL CONVERSION

In this approach, both the old and new system run side by side, it means that the user continues to use the old system and simultaneously learns to operate the new system. When the users are fully trained the new system replaces the old system, this is the safest approach, since in case of failure, the user may immediately turns back to the old one, without any wastage of time and data.

6.3.2 PILOT CONVERSION

In this method, a working version of the system is implemented is one portion of the organization, such as single work area of areas continued to work

with the old system., the only advantage of this approach is to provide a sound basis for the hole system to be install.

6.3.3 DIRECT CONVERSION

In the direct conversion method, the old system is converted to new one immediately. The old system is used until a planned conversion day and then the new on replace it. In this method, there are no parallel activities containing side by side. There is no backup of the old system, which is a big disadvantage of this conversion. In case of failure of the new system, the whole system will collapses.

6.3.4 PHASE IN CONVERSION

The phase in conversion is used whenever it is not possible to install a new system through out an organization all at once i.e. it will be brought in gradually, this type of conversion takes the long period, which is drawback of this approach.

6.3.5 PROPOSED CONVERSION

Since the user needs to get familiar with the new designed system, which might take sometime. So direct CUTOVER and PARALLEL conversions were considered suitable because both the systems cannot runs parallel. Therefore PILOT approach has recommended for the implementation of this project. The argument against PARALLEL conversion is cost and extra workload factors. PILOT approach will be implemented initially is investigation. It no series problem is face by the system, the system will be implemented fully. The PILOT approach will minimize the problems that may arise from the system, failure. It will also provide a better way of comparing the old and new system.

6.4 EVALUATION OF THE SYSTEM

Another whether the developed system has met the goals and objectives of the propose system, which are set in the system description, which is called system evaluation. After testing and installation of system the following merits and demerits have been found.

6.4.1 MERITS

A software system is evaluated by the type of interface that it provides to the user and how well it fulfill the requirements of the user. This interacting platform is run judges by some other factors are measurable objectives, which are central to evaluation.

The merits of the developed system are discussed below.

1. Faster Response Time
2. Consistency
3. Ease of Use
4. Modularity
5. Efficiency
6. List of Values.
7. Physical and Logical Independence of Software
8. Security
9. Modular Approach
10. Reduce Rate of Errors

6.4.1.1 FASTER RESPONSE TIME

The time factor plays a very important role in any computerized system, as it plays a very important role in every field of life. Efforts have been made to reduce the response time for the generations of on-time information. Queries and Reports. The existing system takes large amount of time to produce final results and reports while the computerized system will provide results and reports within reasonable time.

6.4.1.2 CORRECTNESS

The Outputs produced by the new system are found to be satisfactory. Data validation checks are imposed for the storage of correct information. If a user tries to enter incorrect information, he/she gets a warning message to correct it.

6.4.1.3 CONSISTENCY

Consistency is very important in any computerized system, which does not provide consistency, is not efficient. To achieve this notations have been used through out the system. Efforts have been made to keep the data homogeneous. Consistency can be achieved by reducing data redundancy, inserting and updating anomalies in database.

6.4.1.4 EASE OF USE

The system, which has been developed, is menu driver. Data entry, Updating and Query operation are all provided on a single screen. The user can move among almost all of the fields during data entry. At each possible point, help is provided.

6.4.1.5 MODULARITY

The system is divided into a number of modules combined together to fulfill user's requirements. These modules are independent of each other. Different users can work in different modules any time even at the same time. The major advantage of modularity is the ease of modifications and extension of the developed system.

6.4.1.6 LIST OF VALUES

In data entries when user enters, a list of values pops up and from this user can select required value. By using these values, the user does not need to remember entries already made.

6.4.1.7 PHYSICAL & LOGICAL INDEPENDENCE OF SOFTWARE

Physical and Logical data independence is the separation of the way the data is physical stored from the arrangement of the data as presented to the user, if the physical storage of data changes, there is no need to change the order of the field in forms or reports.

6.4.1.8 SECURITY

The system will run only by giving correct user name and password. However, different user has been granted select privileges to use different tables. That is why the security has been implemented at operating level, as well as, at software level.

6.4.1.9 MODULAR APPROACH

The whole system is implemented by designing different modular to perform different tasks. With the help of modular approach during software development, significant advantage of design simplicity and operational efficiency has been obtained. Developed system can therefore, be extended or modified with the help of modular approach.

6.4.1.10 REDUCE RATE OF ERRORS

The rate of errors are considerable reduced in the newly developed system. Appropriate error messages have been provided to prompt the user and refrain him from making errors.

6.4.2 FUTURE MODIFICATION & EXPANSION

The Tool SQL*FORMS used in software allows one to build forms which can be enhanced further. In future, if there arises a need for further improvement & changes, instead of building new application. Further Queries and Reports related to the system can also be added.

6.4.3 PRECAUTION

A regular schedule for database backup should followed to avoid problems causing from system breakdown. The ORACLE utility EXP (Export) should be used for this purpose.

CHAPTER 7

USER'S GUIDE

CHAPTER 7 USER'S GUIDE

7.1 INTRODUCTION

This guide has been made to describe the working of the POL system of MT Division. The different operation that can be performed on the database, such as deletion, insertion and modification etc, are explained in this chapter.

7.2 HOW TO START SYSTEM

First of all you start Developer 2000 and load main.fmb module in object navigator window and press the run button OR select RUN command from File menu. A main menu screen will appear. Which contain following three option.

- 1 Data entry submenu.
- 2 Queries & Reports.
- 3 Exit.

When we press the first button a screen will appear asking user PASSWORD. User is provided here chances for entry of correct password. If all two time wrong password is entered message appears on screen.

ILLEGAL ACCESS TO SYSTEM; PROGRAM ABORTED

After a while the control will be transferred to Developer 2000 Object Navigator window. In case of the PASSWORD is correct then data entry submenu of the system will be displayed (as shown in appendix B) and system will start working with data entry forms.

7.3 FUNCTION KEYS

In DEVELOPER / 2000 different functions like record insertion, deletion, querying records and other functions are also performed interactively i.e. directly from the screen. For this purpose DEVELOPER / 2000 has provided a set of keyboard keys. However for these functions the developer has manually provided some buttons which also do the name job as these keys do.

So, if user wants to see some help about these keys, he/she has to press <help> in the menu, which will pop up a list of options.

7.4 FORM LAYOUTS

Various form layouts are used to enter and retrieve data from the database. They form the bases for under considered database.

7.5 BUTTONS

Different buttons are used to manipulate data in the database through forms instead of using function keys. These are used to retrieve, insert, delete, LOVs, Next Field, Previous Field, Next Record, and Previous Record scroll up/down of records and also modify records in the forms. This feature reduces the effect of forgotten function keys to perform a specific function.

7.6 EDITING FIELD

An editing field is basic unit in the form designing. With the help of it, only a form layout is able to store and retrieve data from the database. In other words, these are the places, where we can enter or retrieve data from form.

7.7 STATUS LINE

Status line is a line on the screen, where Developer 2000's Form Designer displays information about the current status. It is usually the last line on the screen.

Char Mode, which indicates whether in insert or replace mode.

Count, indicates the number of records retrieved.

Canvas. Shows the current canvas name on the screen.

7.8 MESSAGE LINE

The message line is where Form Designer display messages of provides additional help. It is usually the last line on the data entry screen of the particular form layout.

7.9 RECORD MANIPULATION

The following operations can be performed on a record:

- Add Record.
- Delete Record.
- Modify Record.
- Retrieve Record.

7.10 DATA BASE OPERATIONS.

Different kinds of database operations are explained below.

7.10.1 ADD OPERATION

If user needs to enter a new record, which does not exist in the database the user must go through the following procedure:

Open the desired form in which data is to be entered.

The form will be in insert mode. Press the NEW button to insert the appropriate data into the appropriate fields. When wrong type of data will be entered, the system will generate an error i.e. if character value is assigned to the integer field then an error will be generated.

Cursor will be requesting you to enter data.

When entry of first record is completed, save record in the workspace before saving it to the database and insert next record.

Finally click on SAVE button to escape from screen.

If you try to insert a record with the same primary key, the system will generate an error of record duplication.

7.10.2 RETRIEVE OPERATION

There are two operations available for retrieving a particular record, which are given below:

The form is already open.

Press <Query Button> from toolbar.

Enter appropriate value for the text-editing field, which are to use in performing a particular search. It may be single field or more than one fields. First record will be displayed keep on pressing down button to show all record.

7.11 RECORD LOCKING

Developer 2000's Form Designers proved automatic record locking. If another user is updating and deleting record from the database, and hasn't yet completed the change to the database, form designer tells the user that it is waiting for that person to make the changes permanent. In the mean time, if we try to access the same record, our access is denied.

Thus at a latter time, we may to fetch the record again.

7.12 SEARCH ENGINE

When we perform a particular search, form designer fetches all records from the table associated with the current block and displays them on the screen, usually one at a time.

The following four steps are generally involved in performing a particular search:

- Initiating the query.
- Entering the query.
- Executing the query.
- Fetching the subsequent record.

7.12.1 COUNT QUERY RECORDS

The following procedure is used to count query:

Display the desired form.

Press <Query> in QUERY form toolbar.

Enter search criteria.

Click on Exit button to exit form.

Form Designer automatically counts the number of codes record that satisfy a particular condition and displays the number on message line.

7.13 REPORT GENERATION

Click on reports in the popup main menu or from toolbar and then on the desired report. You may generate report of that form which is opened by clicking the report button on the opened form. The required result will be printed as well on the screen.

7.14 DISPLAY AND PRINTING ENGINE

Selecting the report option, from the main menu screen displays or popup the list of required reports. Click on the required report, it will print it to the screen and also on the printer also, if required. Report layouts are given in Index.

7.15 SECURITY IMPLEMENTATION

Security is promptly handled by DBA. One of the duties of DBA is to enable the user of the computer system to use an Oracle database. In order to use Oracle data, one must first have access to the computer and the operating system i.e. through an identification name and a password in order to ensure no invalid access to the system. These are assigned independent of the Oracle and provide an access to an Oracle database and programs.

To gain an access to Oracle database, he/she must have an Oracle username and password valid for a given database. The data dictionary stores information about every username i.e. whether the user has CONNECT, RESOURCE and DBA privilege. At any time the DBA can create new ORACLE username using the SQL statement GRANT with the CONNECT option.

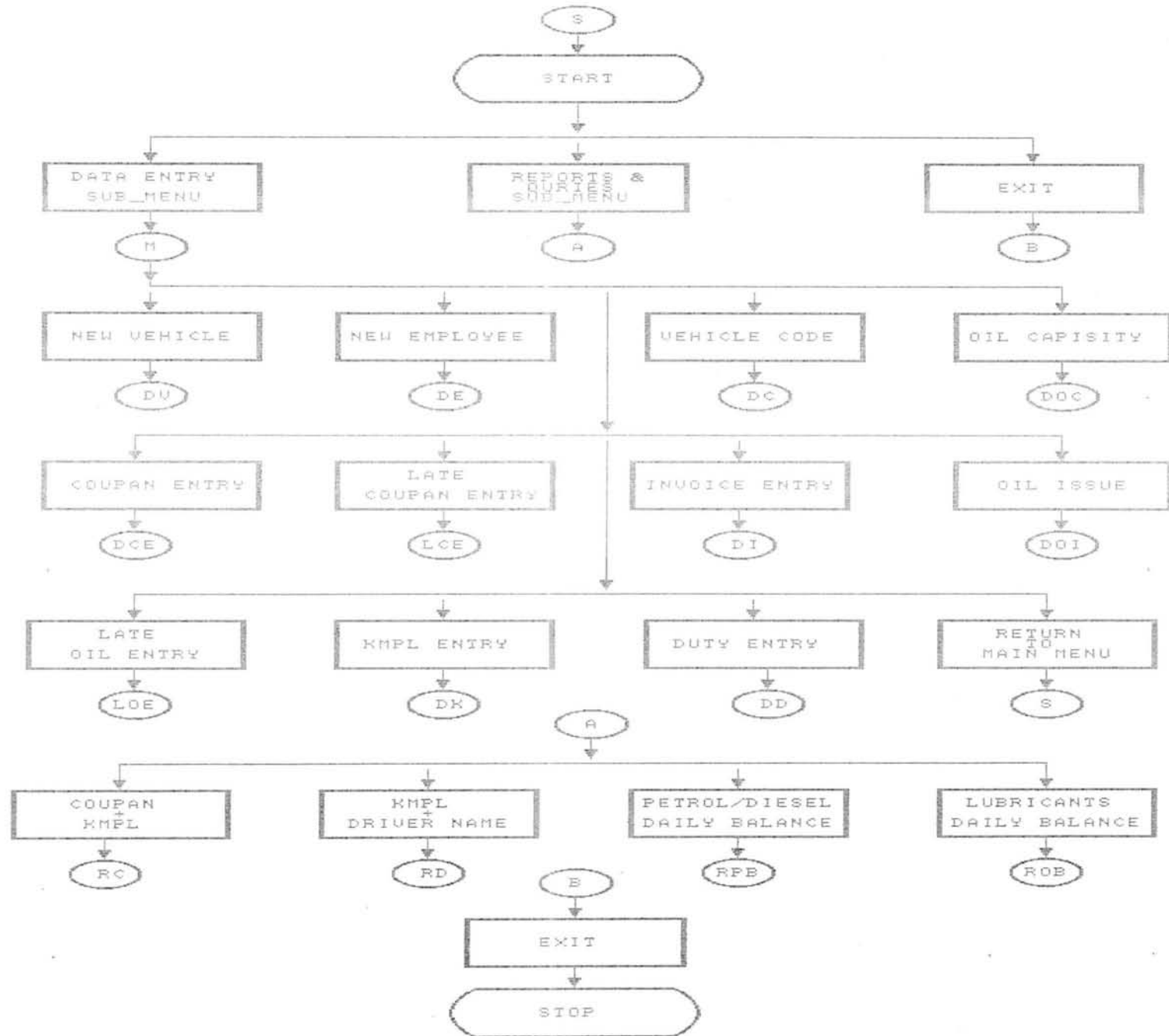
E.g. GRANT CONNECT, RESOURCE, DBA TO Niazi

Where username = Niazi password = nia

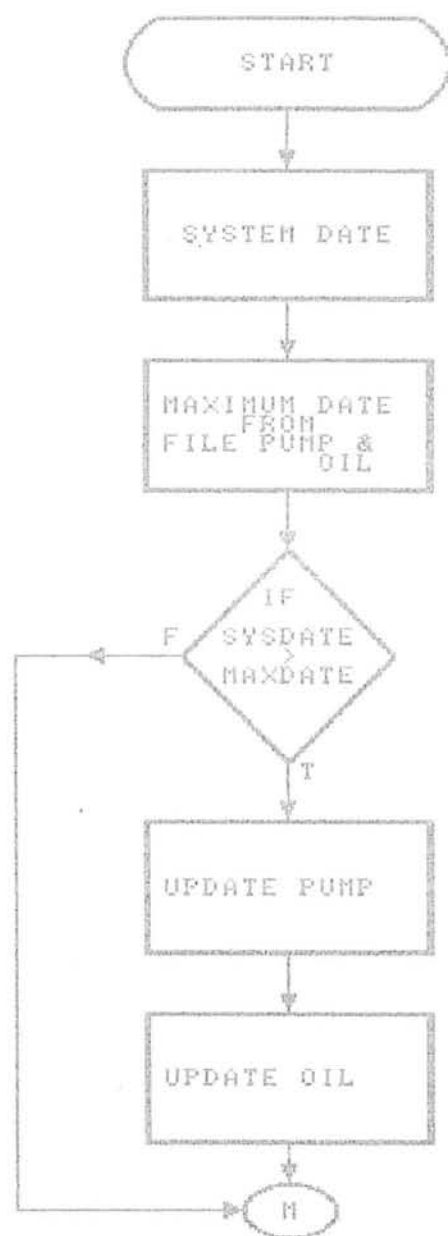
APPENDIX 'A'

PROGRAM FLOW CHARTS

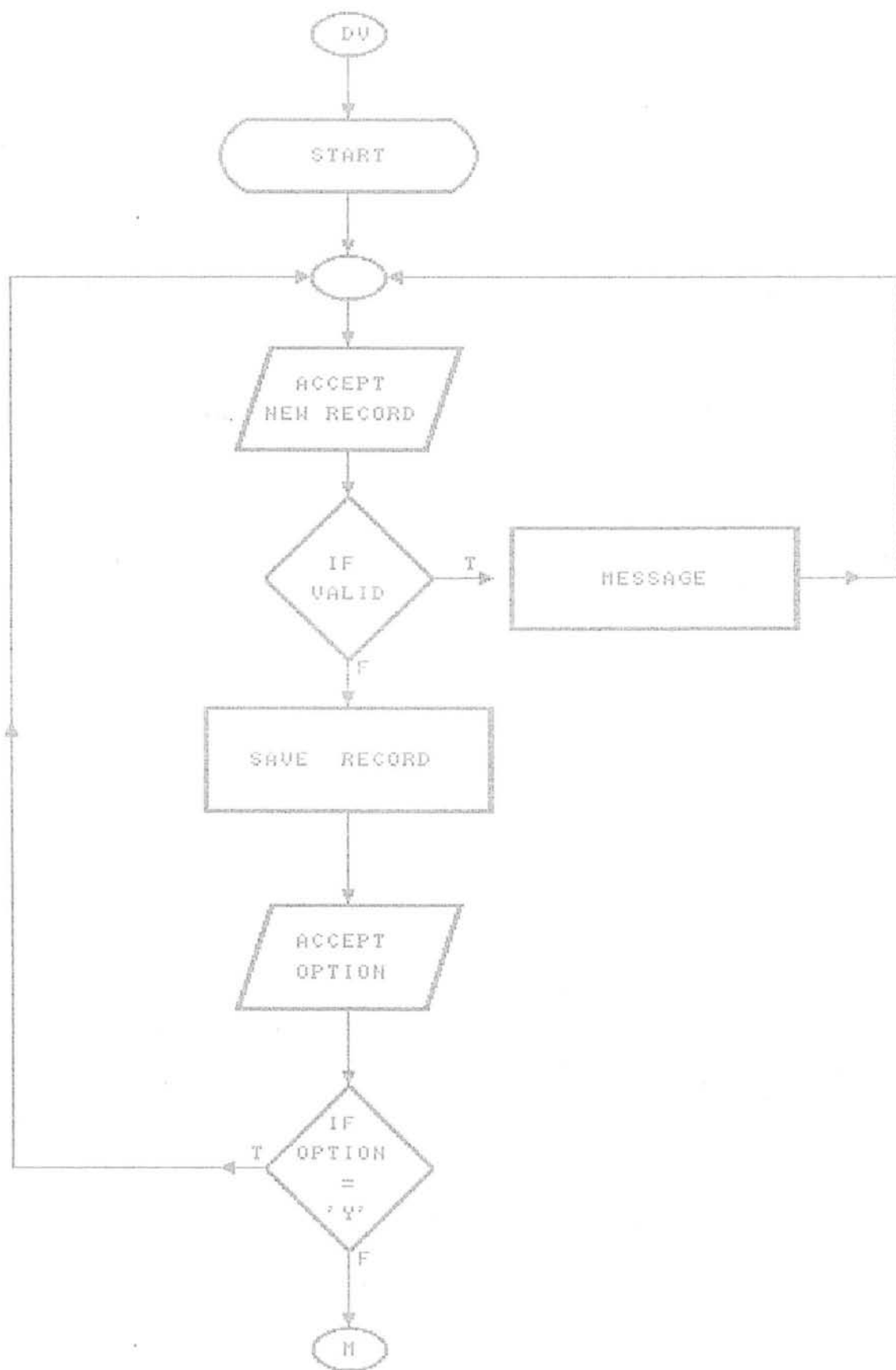
MAIN PROGRAMME FLOW CHART



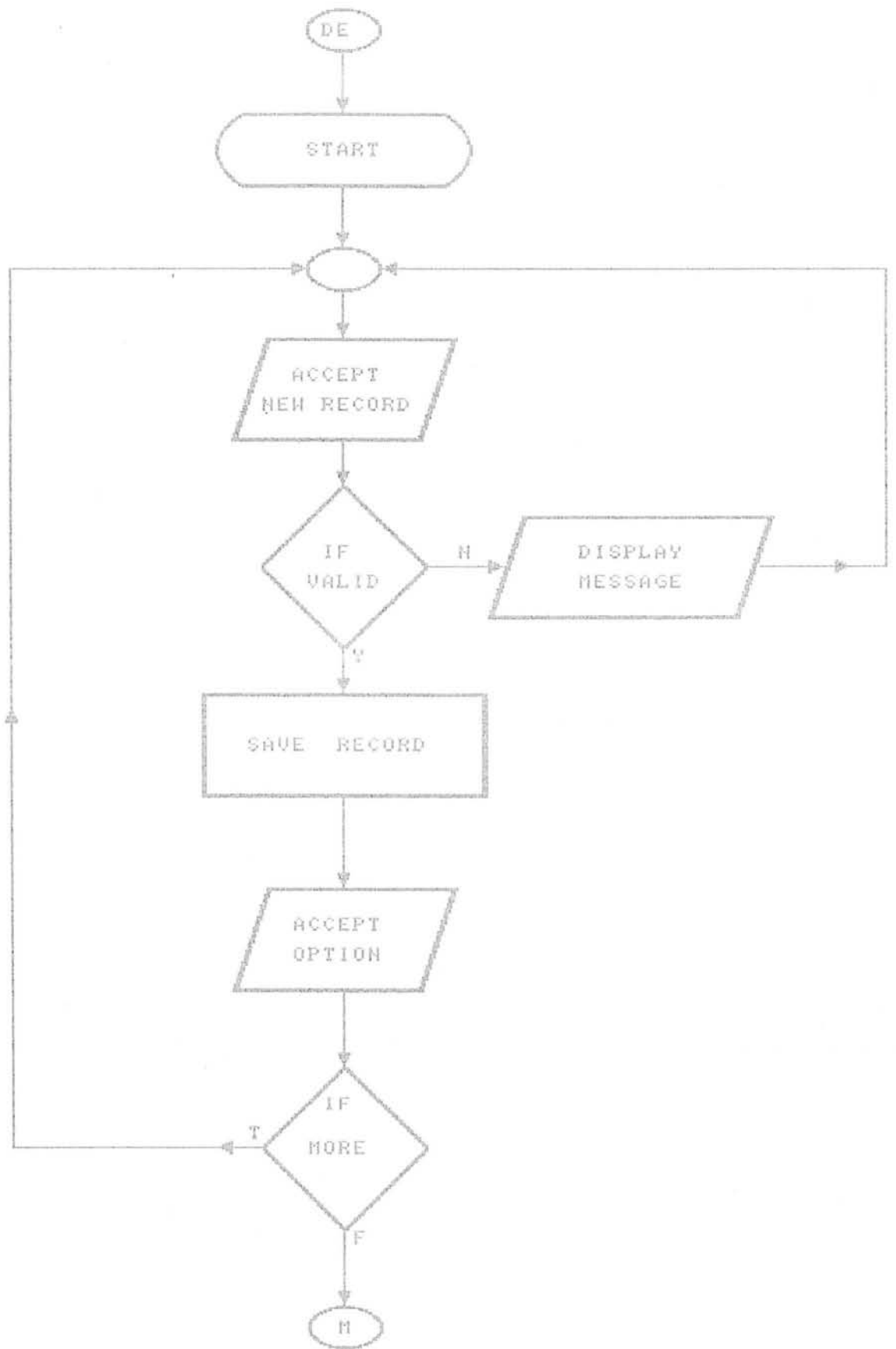
COMPUTERIZATION OF POL SYSTEM
START PROGRAM'S FLOW CHART



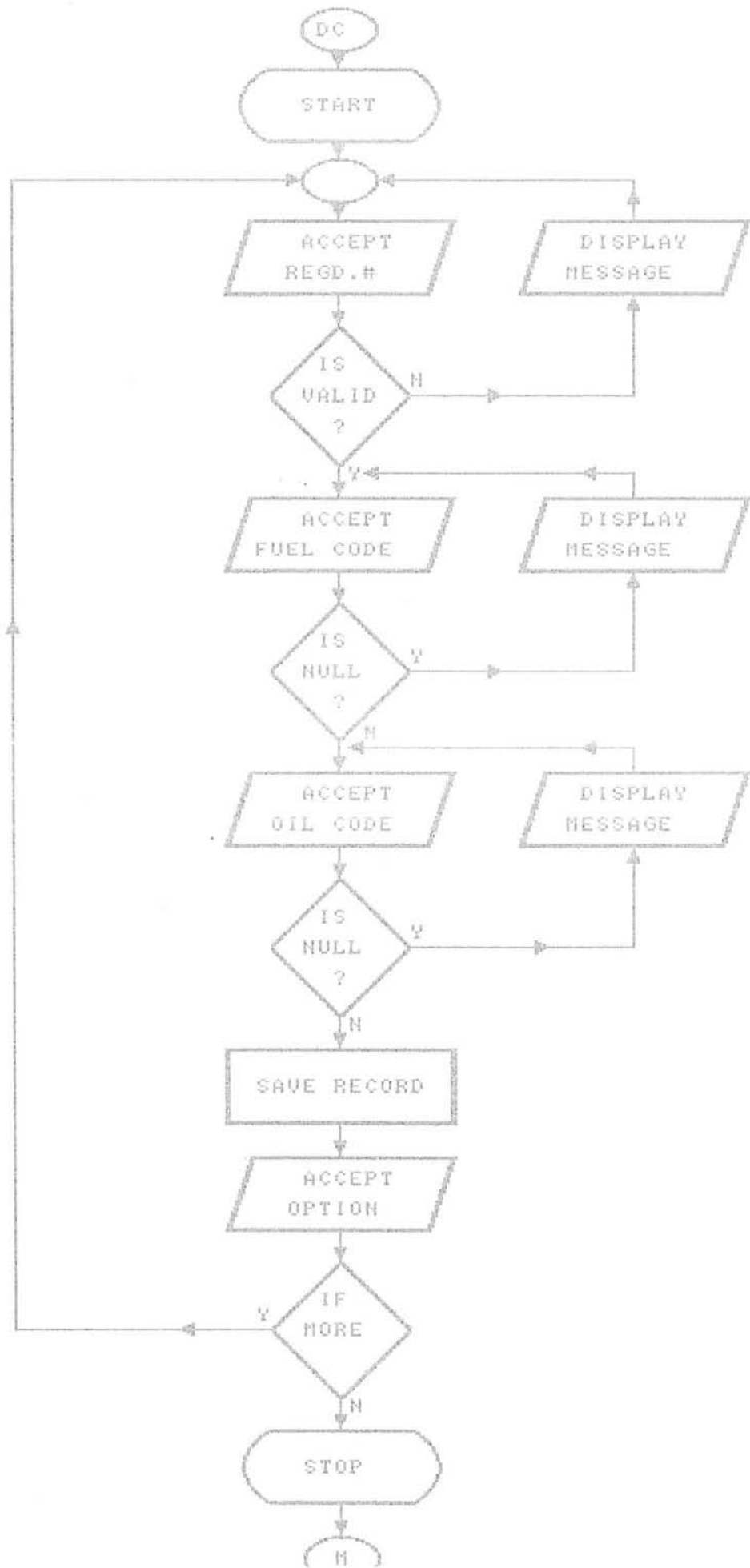
VEHICLE ENTRY PROGRAM FLOW CHART



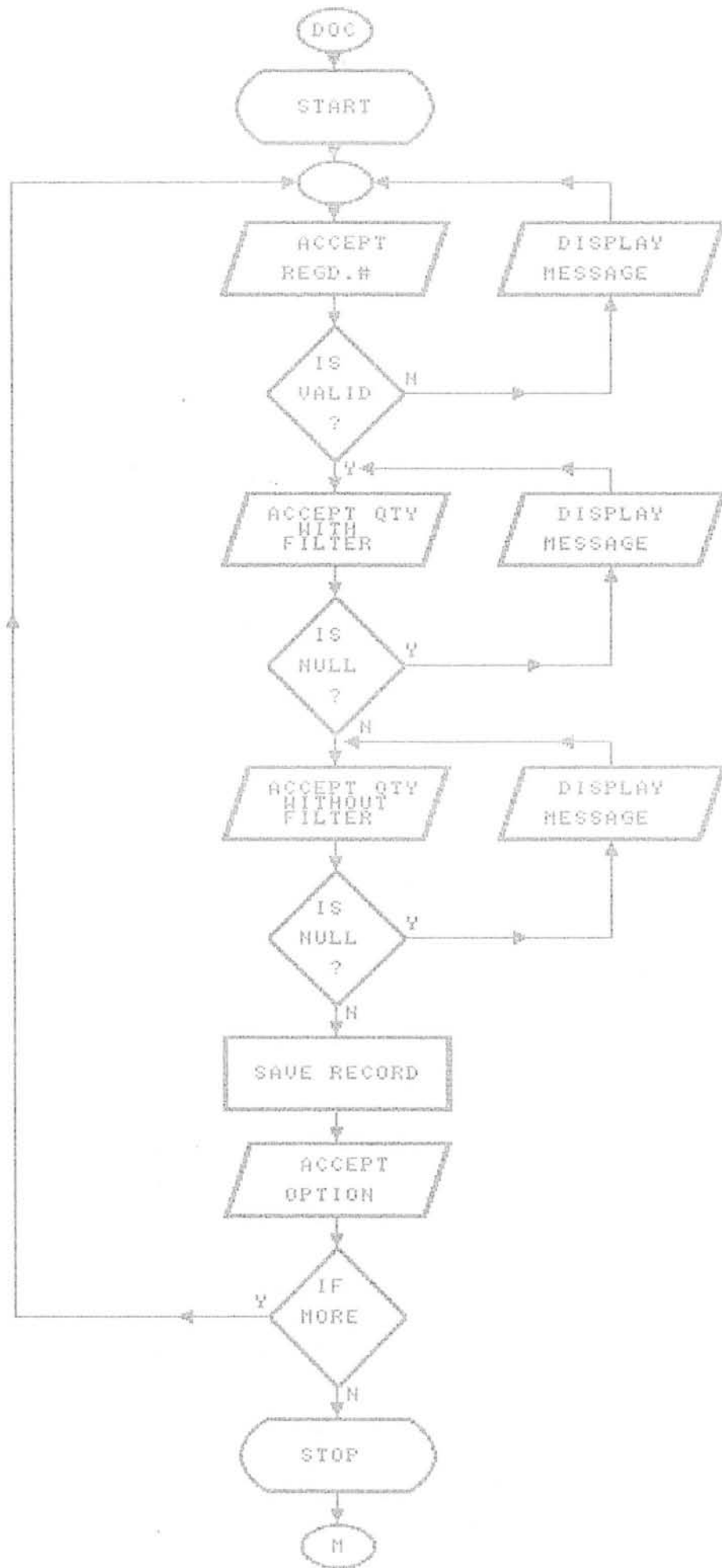
BIO DATA ENTRY PROGRAM FLOW CHART



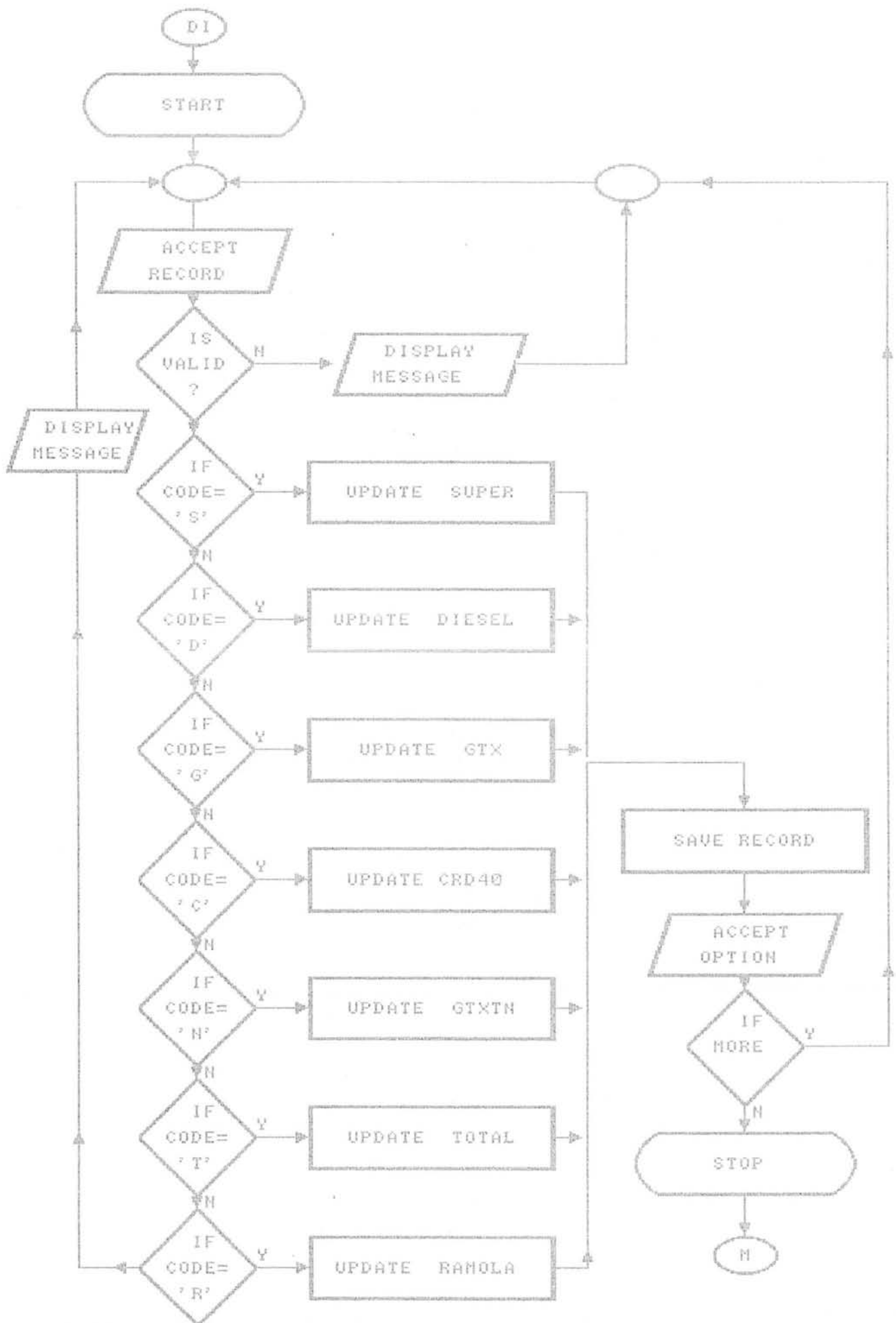
VEHICLE CODE ENTRY PROGRAM FLOW CHART



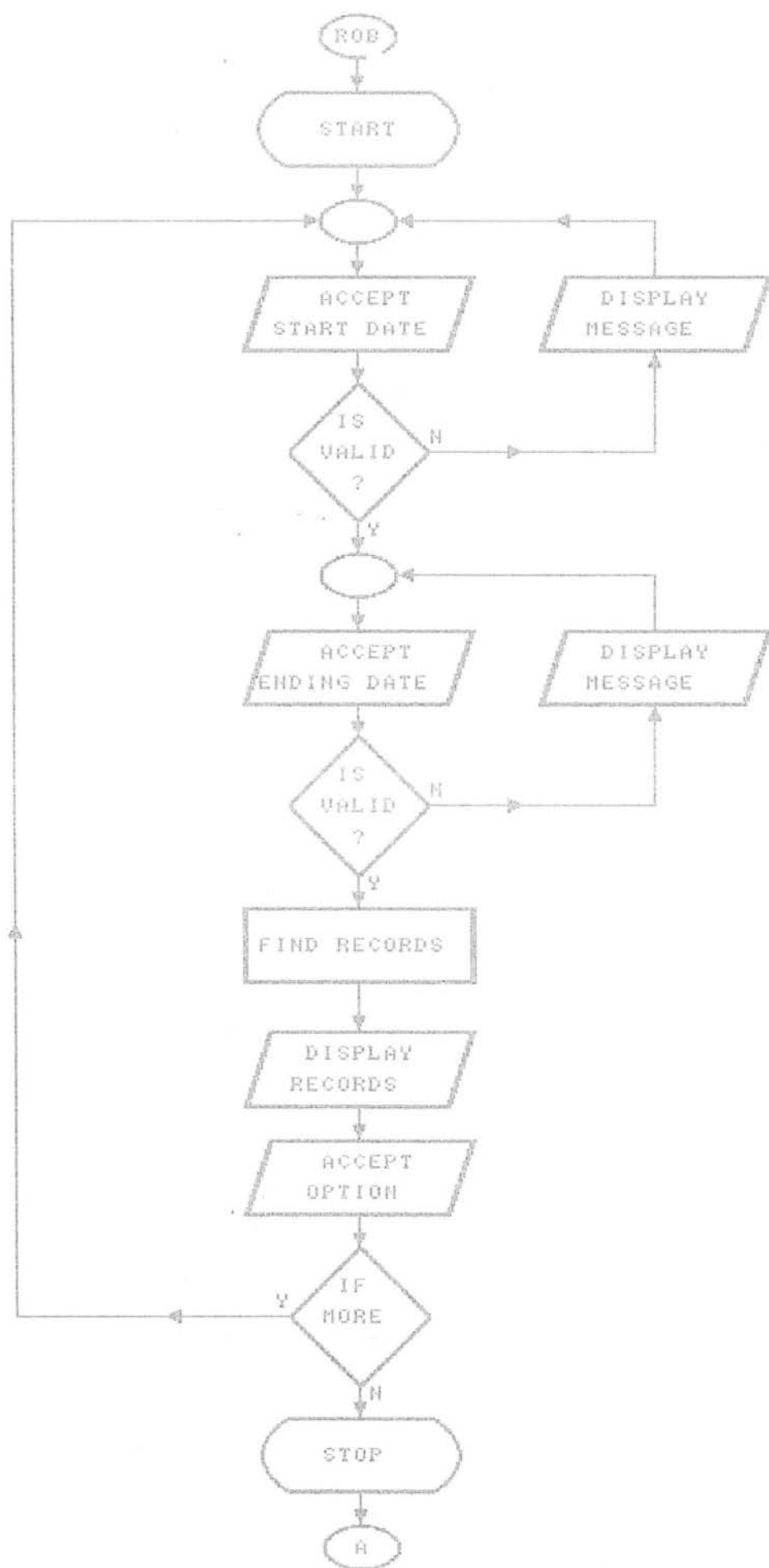
OIL CAPACITY ENTRY PROGRAM FLOW CHART



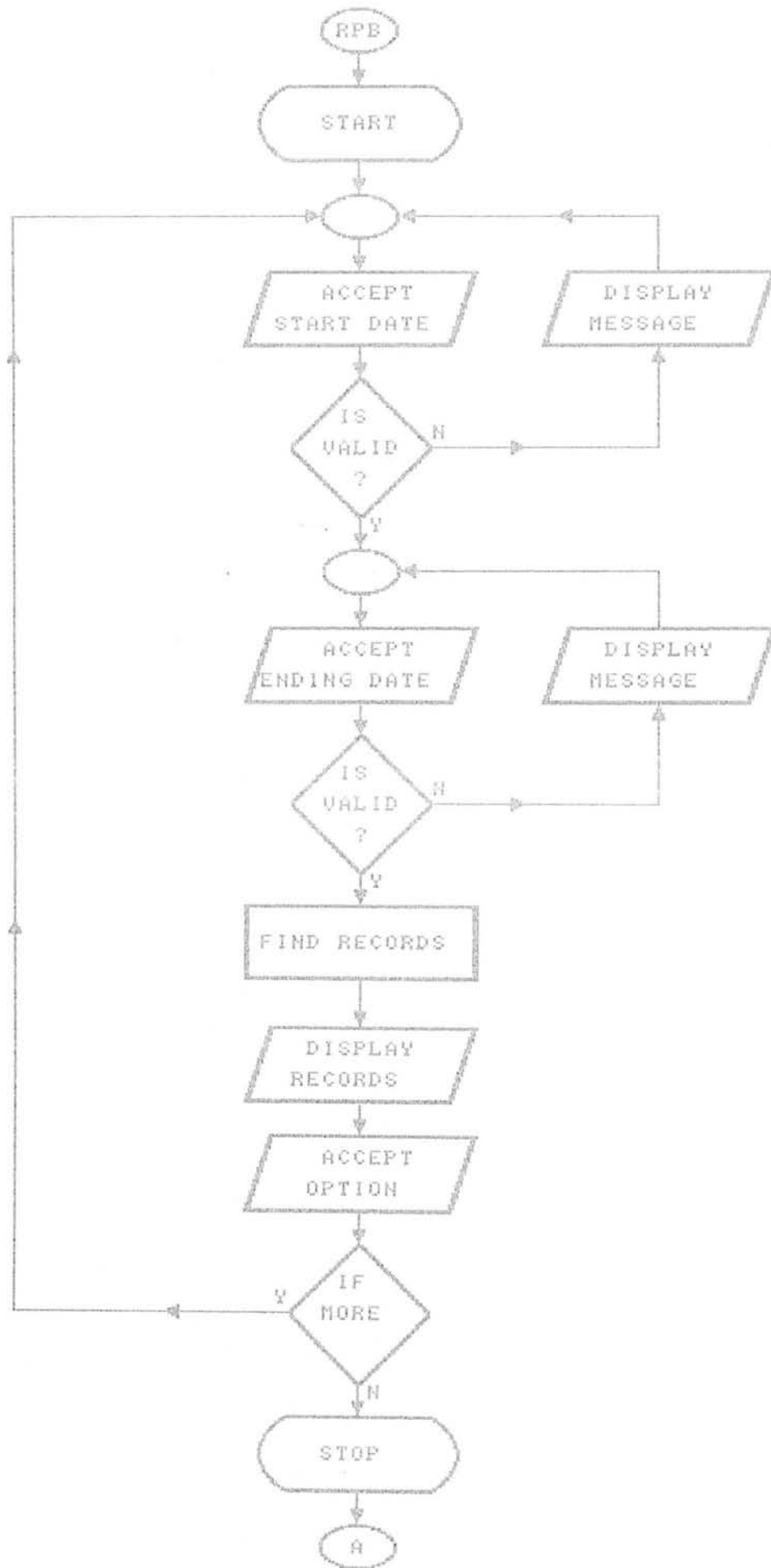
INVOICE ENTRY PROGRAM FLOW CHART



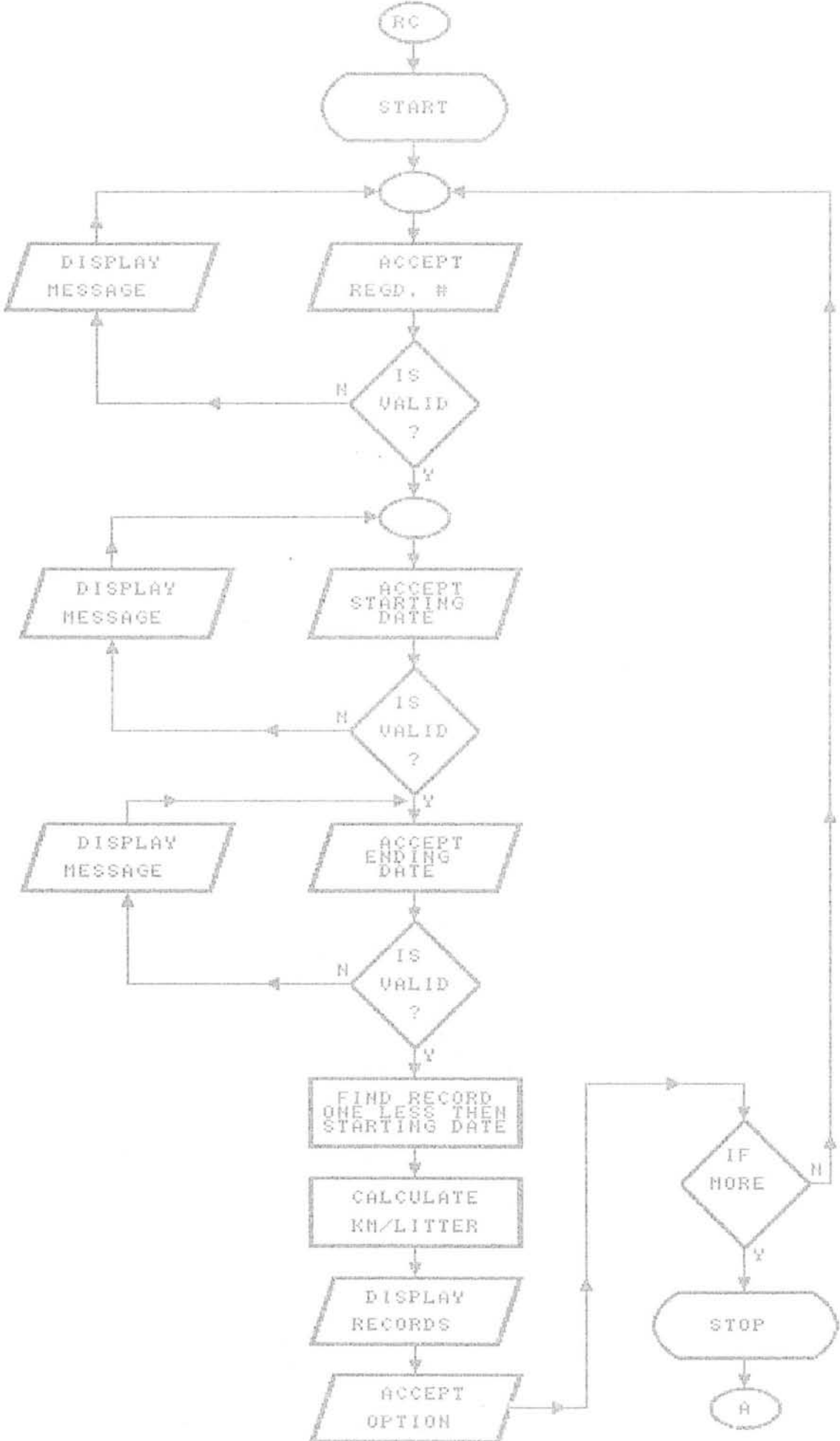
Lubricants Ledger Programme Flow Chart



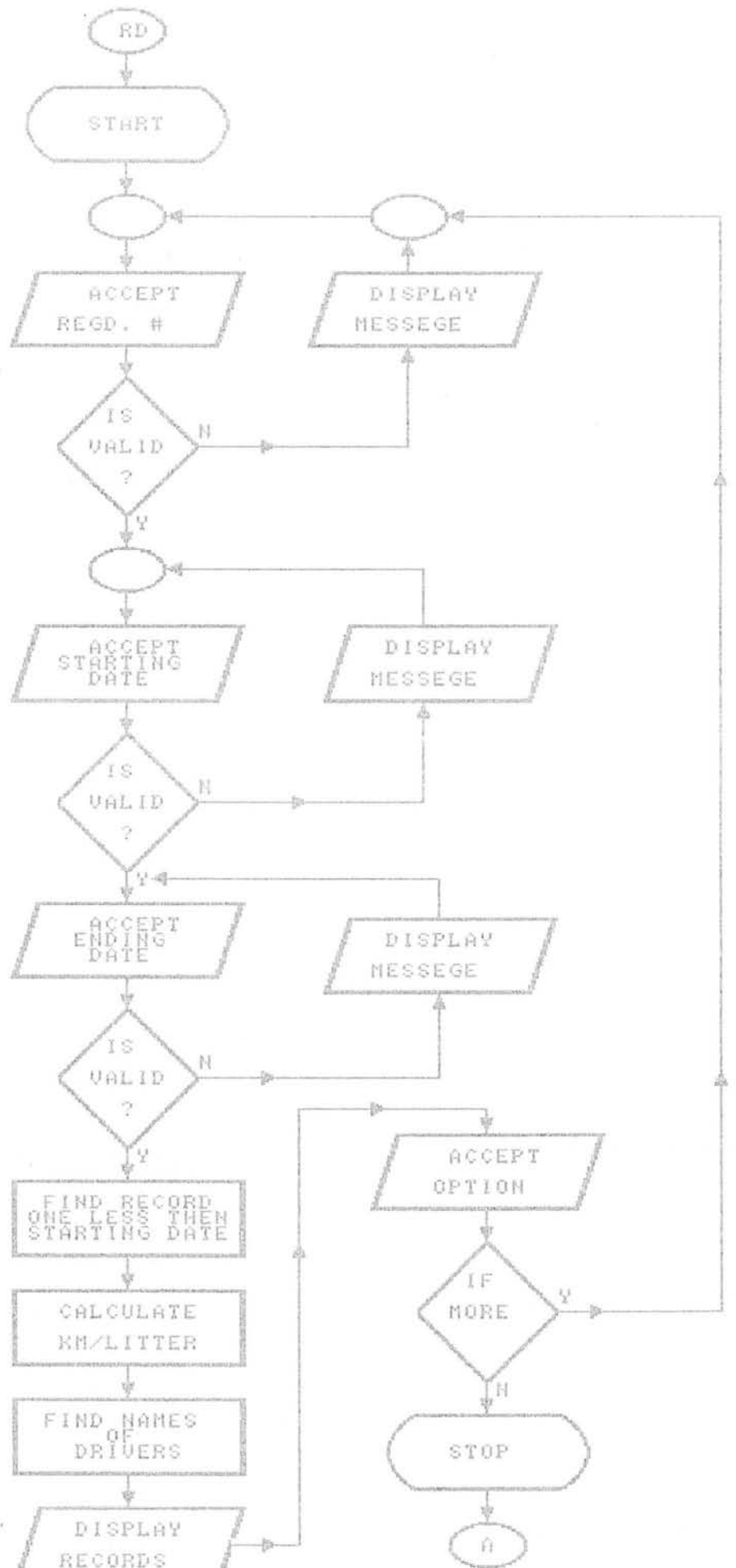
Petrol/Diesel Ledger Programme Flow Chart



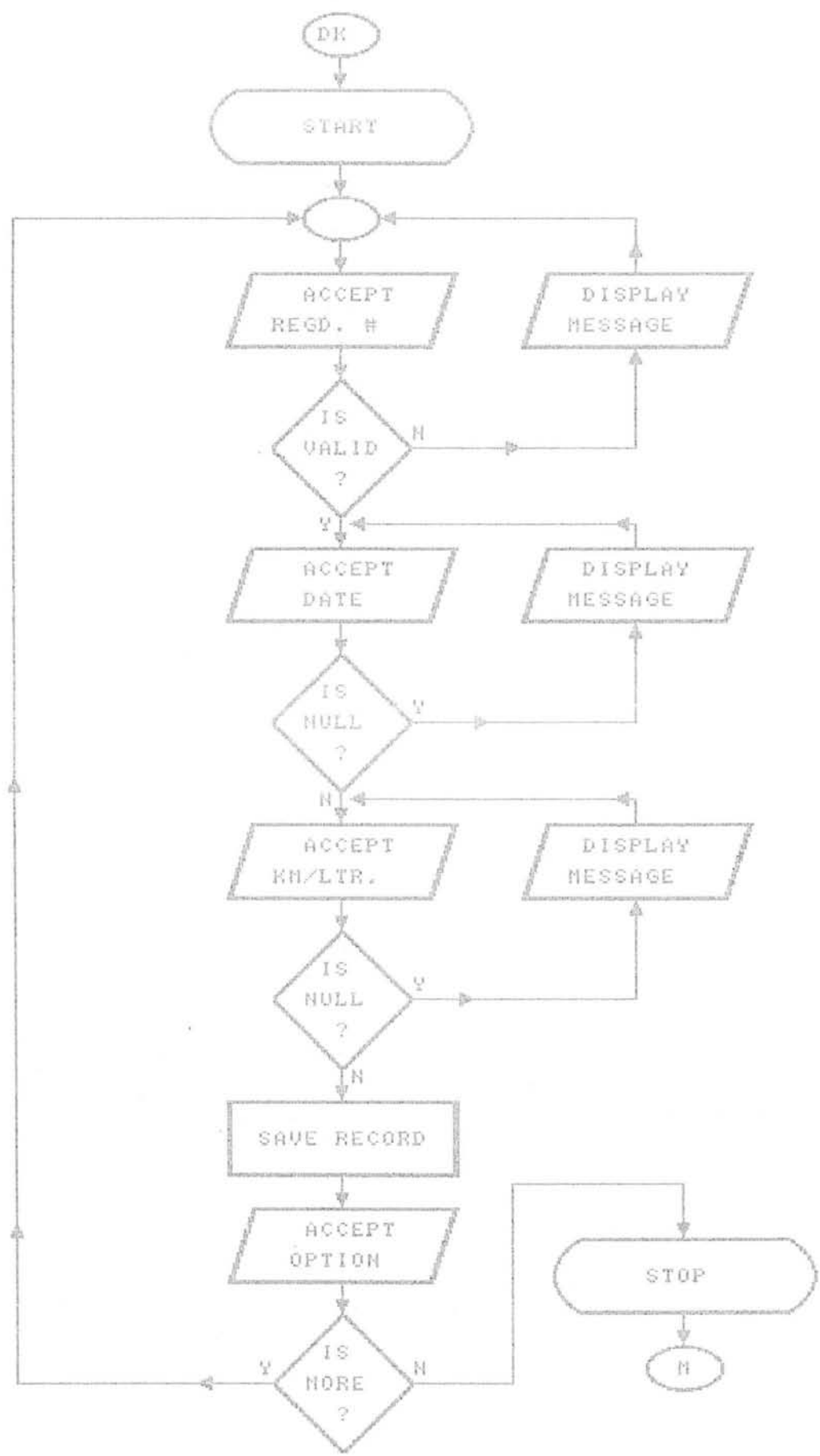
Coupan_KMPL Programme Flow Chart



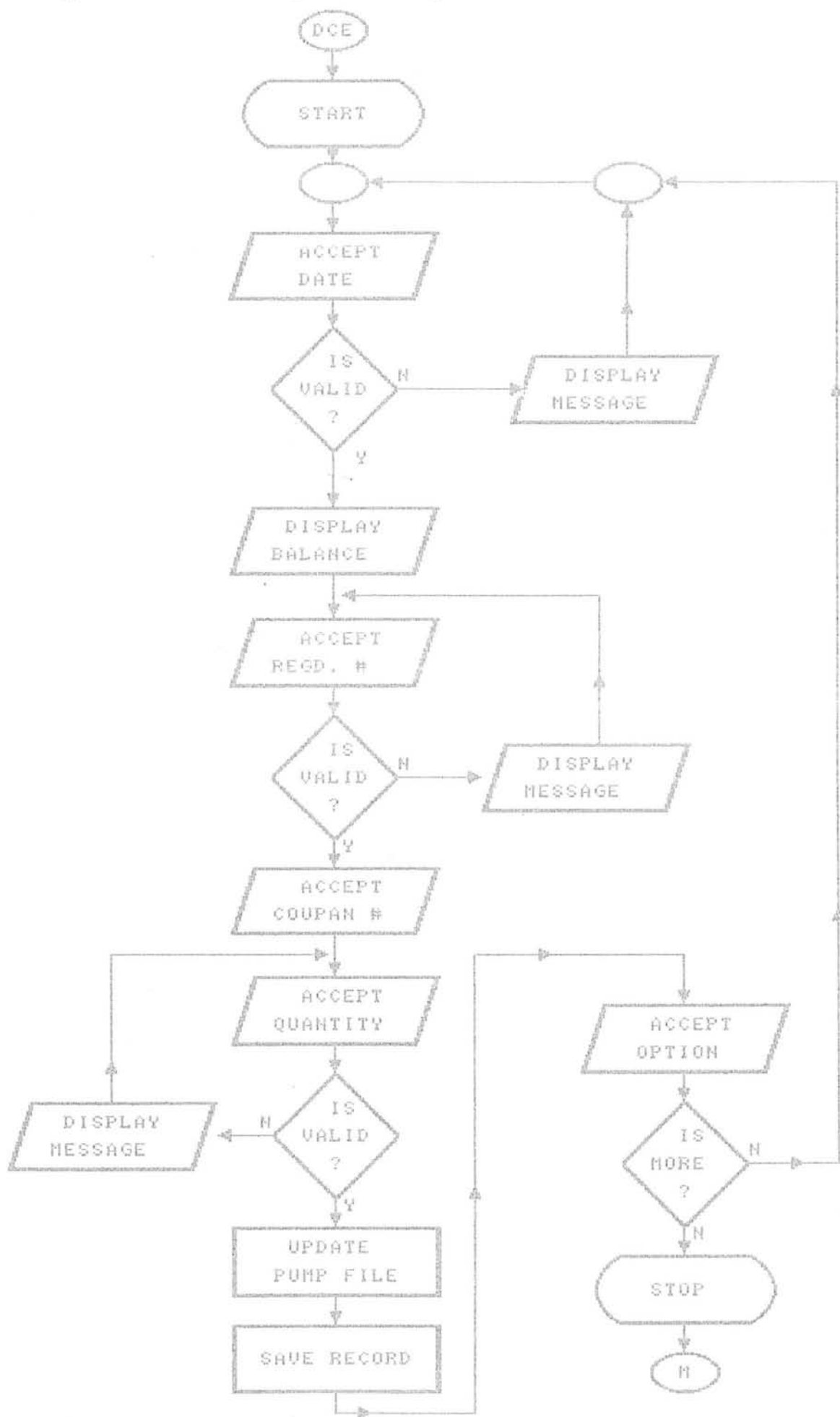
Coupan_KMPL_Driver's Name Programme



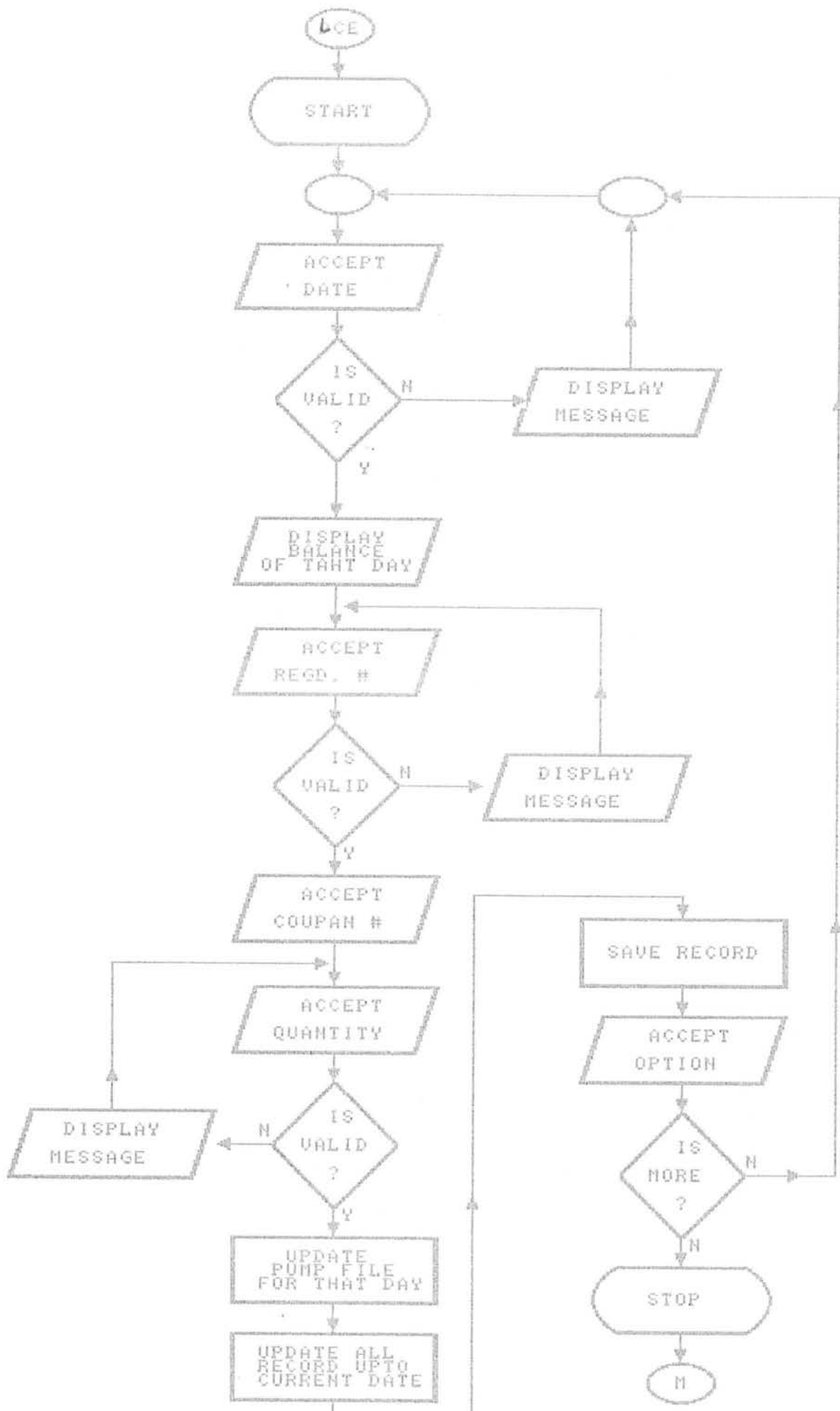
Vehicle KMPL Entry Programme Flow Chart



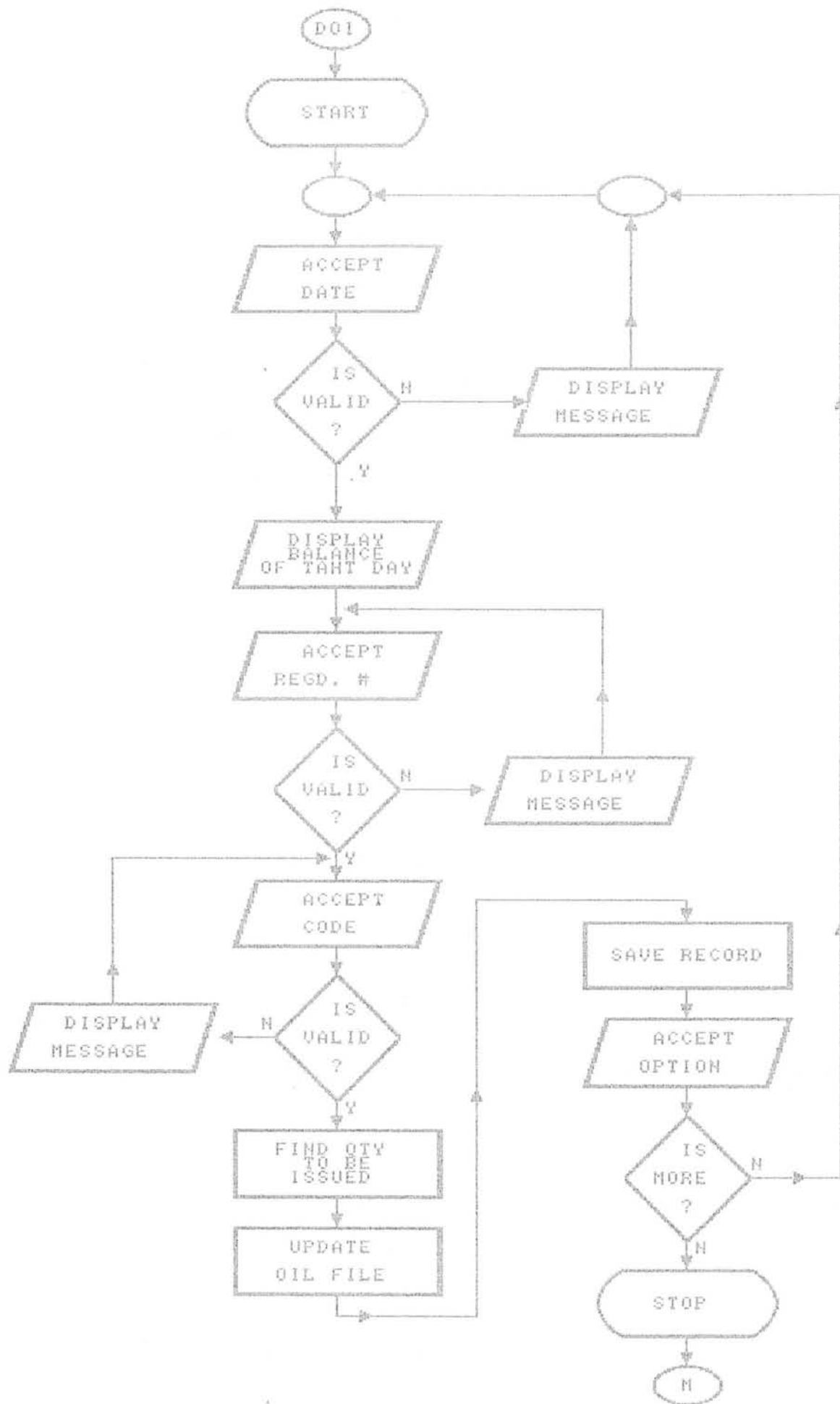
Coupan Entry Programme Flow Chart



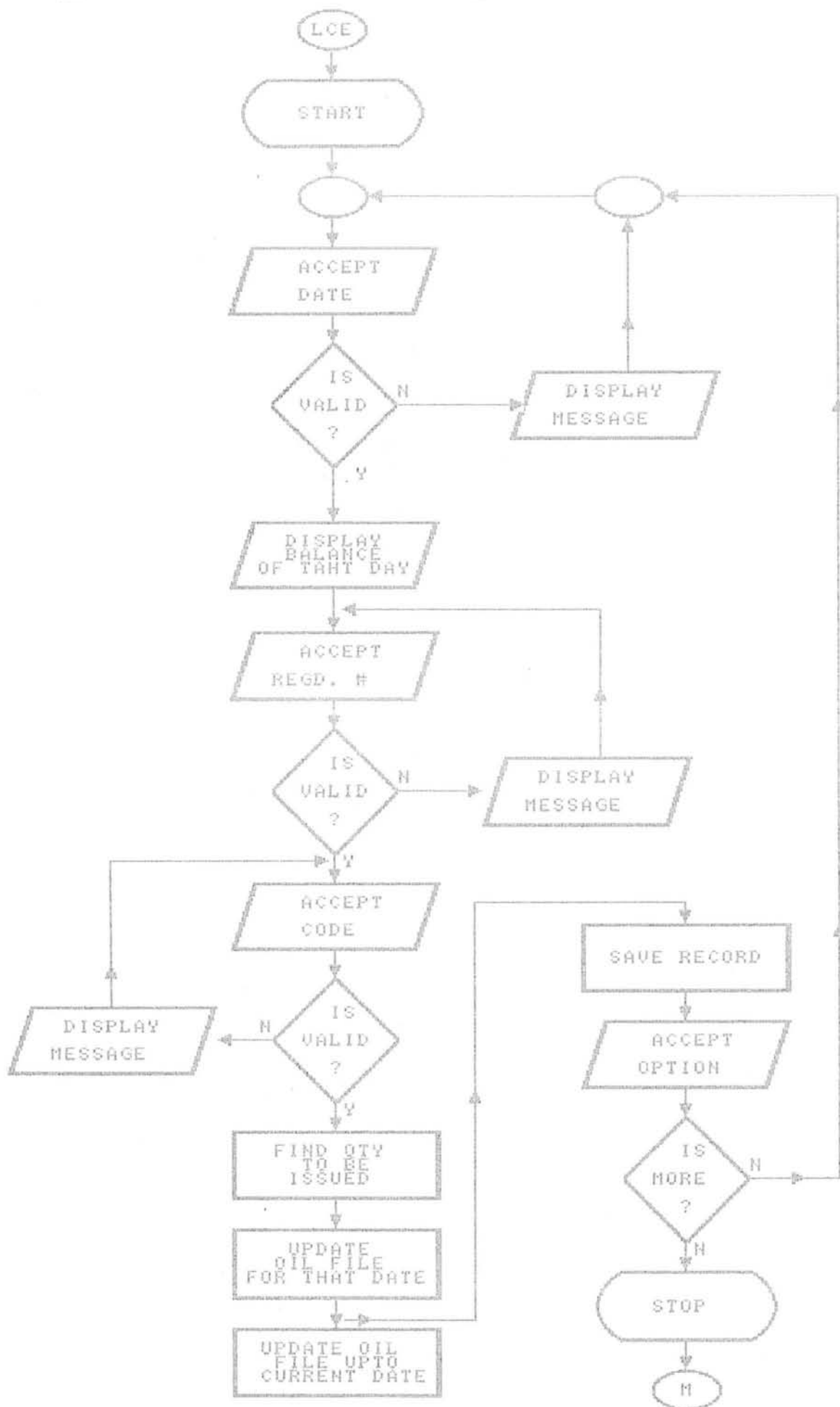
Late_Coupan Entry Programme Flow Chart



Oil Issue Entry Programme Flow Chart



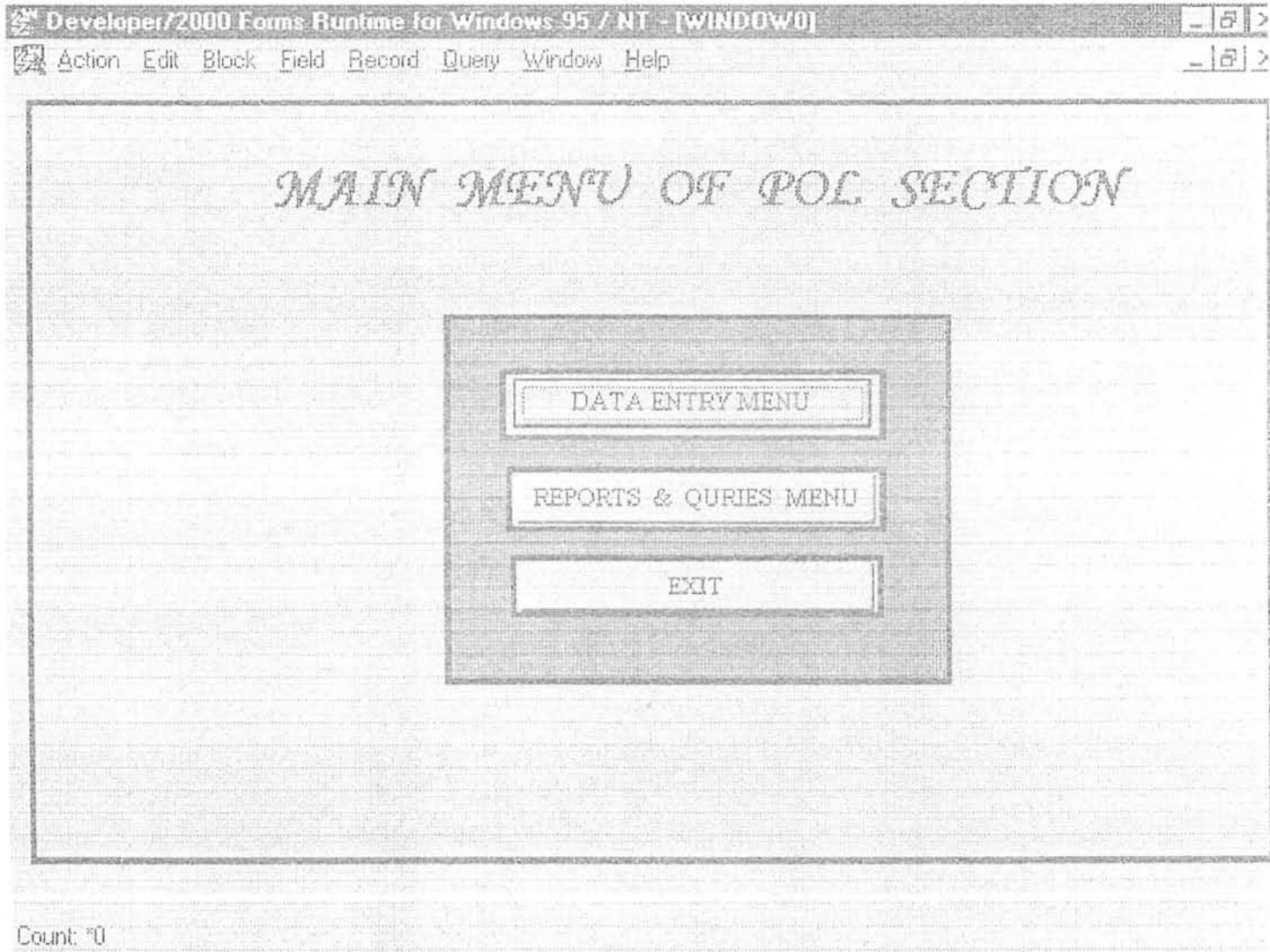
Late_Oil Issue Programme Flow Chart



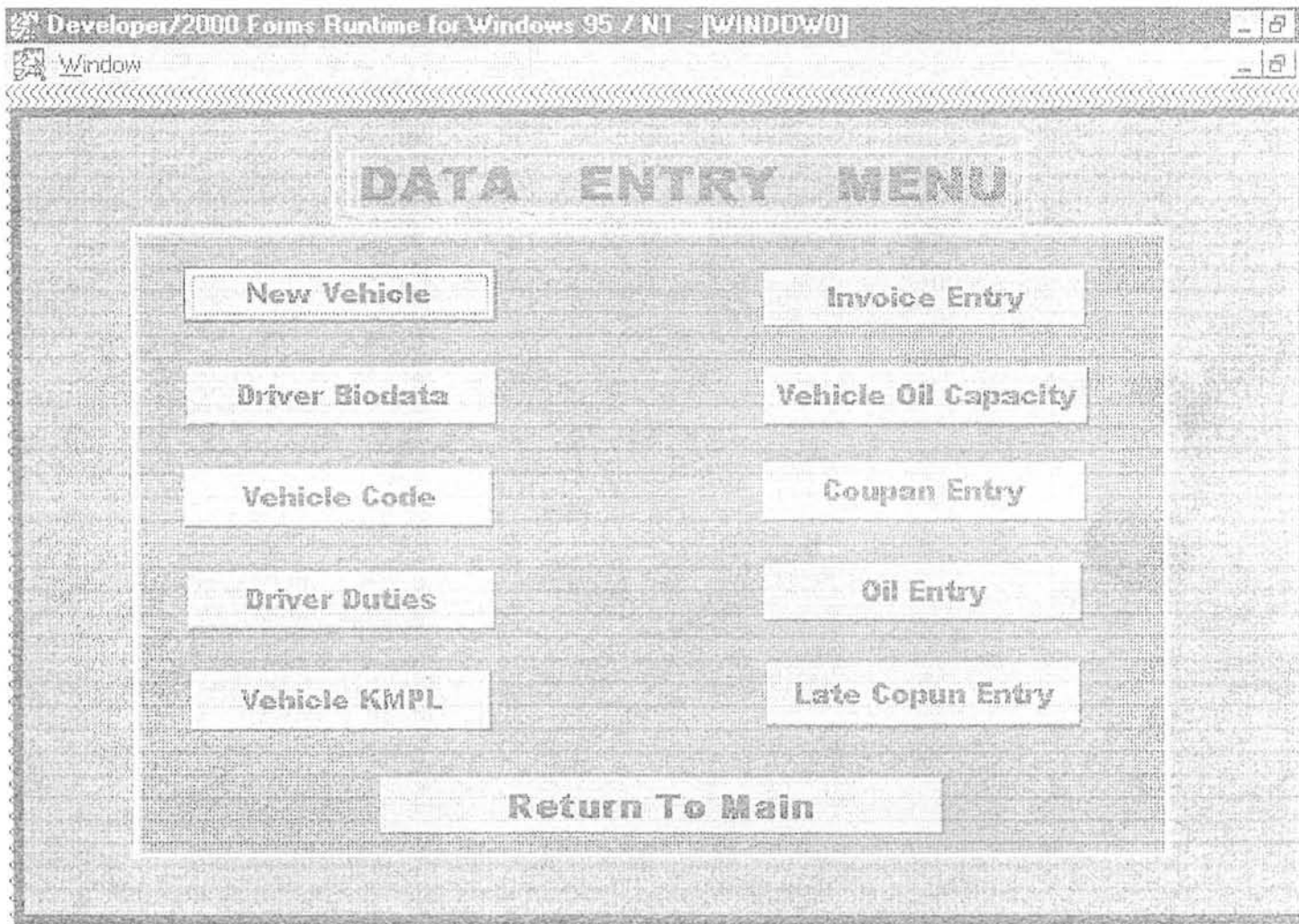
APPENDIX 'B'

SCREEN & REPORTS LAYOUTS

MAIN MENU:

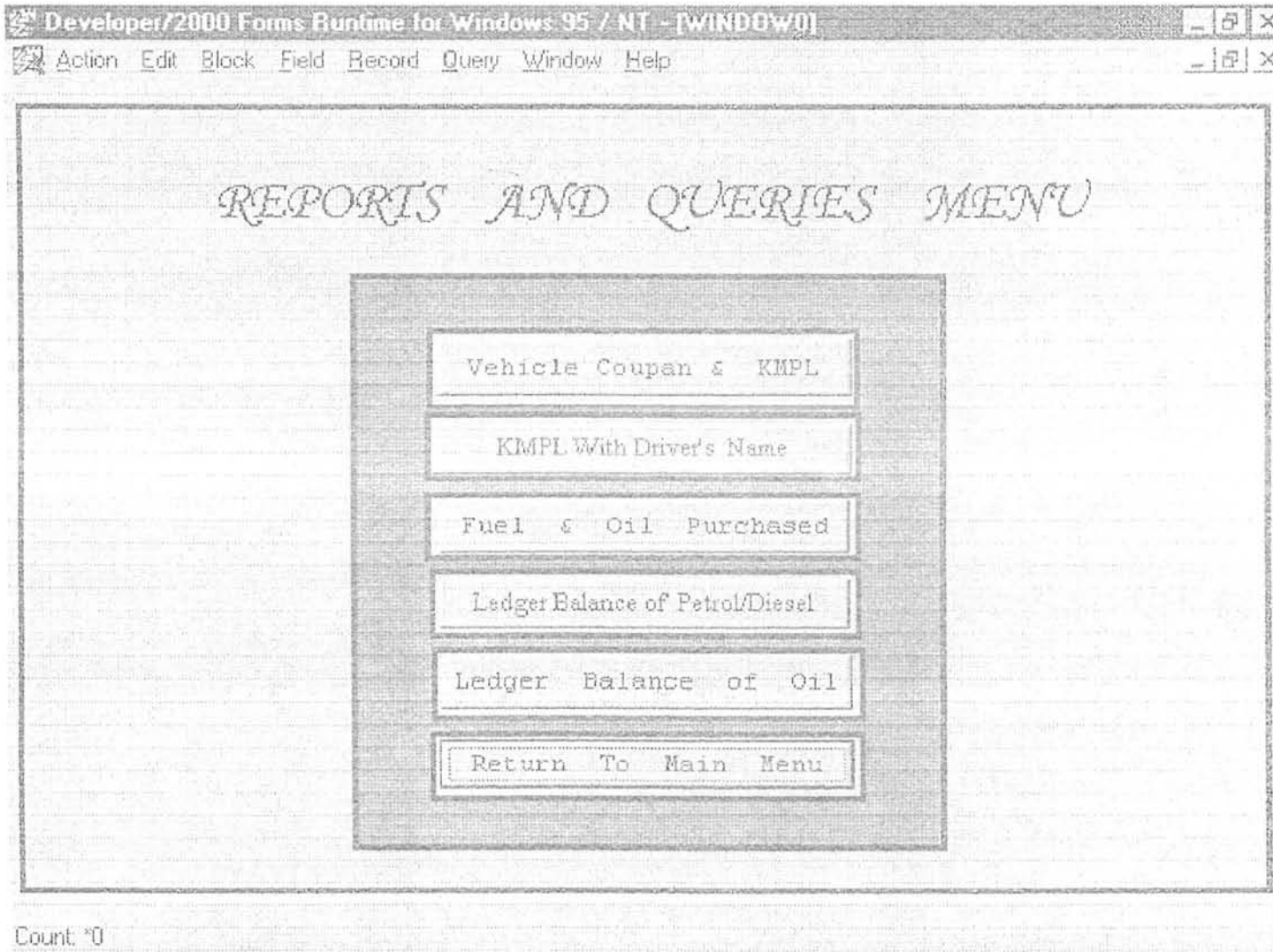


DATA ENTRY SUB MENU :



Count: '0

REPORTS & QURIES SUB MENU:



NEW VEHICLE ENTRY FORM:

Data of every new vehicle purchased by the organization entered through this form.

Developer/2000 Forms Runtime for Windows 95 / NT - [WINDOW0]

Action Edit Block Field Record Query Window Help

ENTER DATA FOR NEW VEHICLE

Registration Number	<input type="text"/>	Maker	<input type="text"/>
Make & Type	<input type="text"/>	Code	<input type="text"/>
Horse Power	<input type="text"/>	Type	<input type="text"/>
Model	<input type="text"/>	Engine #	<input type="text"/>
Chassis #	<input type="text"/>	Seating Capacity	<input type="text"/>
No. Of Cylinders	<input type="text"/>	Type Of Battry	<input type="text"/>
Tank Capacity	<input type="text"/>	Date Of Receive	<input type="text"/>
Metter Reading	<input type="text"/>		

Last Rec.	Previous	Next	First Rec.	Query
-----------	----------	------	------------	-------

Save
Delete
Exit

Count: 10

EMPLOYEE'S ENTRY FORM:

Biodata of employee of this organization is entered through this form.

Developer/2000 Forms Runtime for Windows 95 / NT - [WINDOW] - [] X
Window - [] X

Employee's Biodata

Personal #	<input type="text"/>	Name	<input type="text"/>
Status	<input type="text"/>	Designation	<input type="text"/>
Academic Rec.	<input type="text"/>	Date Of Birth	<input type="text"/>
Date Of Appointment	<input type="text"/>	Scale	<input type="text"/>
Address	<input type="text"/>		

<<	<	>	>>	Query	Save	Exit
----	---	---	----	-------	------	------

Count: *0

DUTYS OF DRIVERS:

Each driver has it personal number . In this form registration number of the vehicle and personal number of the driver is entered.

Developer/2000 Forms Runtime for Windows 95 / NT - [WINDOW] _ □ ×

Window _ □ ×

DRIVER ' S DUTY ON VEHICLE

Vehicle Registration #

Personal Number of Driver

Exit	Save Record	Amend More...?
------	-------------	----------------

Enter vehicle registration # ----- OR ----- Select through List Of Values.
Count: *0 <List>

FUEL COUPAN ENTRY FORM:

Fuel is issued to each vehicle Petrol pump and a coupon slip is made bearing registration # of that vehicle , quantity of fuel issued, date, personal number of that driver and present reading of milage meter of that vehicle. All this data is entered through this form.

Developer/2000 Forms Runtime for Windows 95 / NT - [WINDOW0] [-] [F] [X]

Window [-] [F] [X]

FUEL COUPON ENTRY

Balance OF Petrol	Balance OF Diesel	
Enter Date <input style="width: 100px;" type="text"/>		
Registration # <input style="width: 100px;" type="text"/>	Coupon # <input style="width: 100px;" type="text"/>	Quantity of Fuel <input style="width: 100px;" type="text"/>
Metter Reading <input style="width: 100px;" type="text"/>	Driver's Personal # <input style="width: 100px;" type="text"/>	
<input type="button" value="Exit"/>		<input type="button" value="Save"/>

Enter DATE in this formate -- DD-MON-YY
Count *0

VEHICLE CODE ENTRY FORM:

Code are used for Petrol, Diesel & different kind of Oil. These code are entered through this form.

Developer/2000 Forms Runtime for Windows 95 / NT - [WINDOW0]

Window

Enter codes of vehicle

Registration No.

Fuel Code

Oil Code

<<	<	>	>>	Query	Save	Exit
----	---	---	----	-------	------	------

Enter Registration # of the vehicle --- QR --- Select by pressing F9
Count: *0 --- <List>

INVOICE ENTRY FORM:

Invoices of petrol, diesel and lubricants are entered through this form. This form also update pump file and oil file.

Developer/2000 Forms Runtime for Windows 95 / NT - [WINDOW01] - [X] [F] [S]
Window - [X] [F] [S]

Enter Data Of Invoice

Invoice # Invoice Date

Invoice Code Draft #

Quantity

<<	<	>	>>	Query	Save	Exit
----	---	---	----	-------	------	------

Enter Invoice Number upto seven digits for example 0001517
Count: 0

OIL ISSUE FORM:

Oil issued to the vehicle is entered through this form. This form also update the oil file.

Developer/2000 Forms Runtime for Windows 95 / NT - [WINDOW0]

Window

Oil Issue To Vehicles

Registration #	<input type="text"/>	Date	<input type="text"/>
code with/without filter	<input type="text" value="0"/>	Oil issued	<input type="text"/>

<< < > >> Query Save Exit Form

Enter Registration # of Vehicle ----- OR ----- Select through List ---- Press F9
Count: *0 <List>

KMPL FORM:

Fuel drawn by a vehicle during a specific period can be check and vehicle KMPL can be calculated through this form.

Developer/2000 Forms Runtime for Windows 95 / NT - [FUEL_COUPONS] _ | 5 | >

Action Edit Block Field Record Query Window Help _ | 5 | >

Enter Vehicle's Registration # & Dates

Registration #	Starting Date	Ending Date
[RIT-7011]	[02-JUN-00]	[10-JUN-00]

Fuel taken By The Vehicle

Fixed
10.7 Km/litr.

DATE	Coupen	Metter	Fuel	KMPL	
07-JUN-00	7	375	10	46	^
08-JUN-00	9	475	10	10	
09-JUN-00	10	525	23	2.17	
10-JUN-00	12	600	7	10.7	v

Total Fuel = 110 Itrs.

Show Details
Report
CLEAR
EXIT

Count: *9

FUEL REPORT OF VEHICLE NO. <input type="text" value="RIT-7011"/>			
DATE	COUPAN	METER	FUEL
02-JUN-00	2	550	12
03-JUN-00	3	600	13
04-JUN-00	4	715	11
05-JUN-00	5	779	7
06-JUN-00	6	834	17
07-JUN-00	7	375	10
08-JUN-00	9	475	10
09-JUN-00	10	525	23
10-JUN-00	12	600	7

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KMPL & DRIVER NAME :

Fuel drawn by a vehicle during a specific period can be check and vehicle KMPL can be calculated through this form. It also provide information about the driver who draw the fuel.

DESIGNED BY A.N. NIAZI - [FUEL COUPONS]

Action Edit Block Field Record Query Window Help

Enter Vehicle's Registration # & Dates

Registration #	Starting Date	Ending Date
RIT-7011	02JUN-00	10JUN-00

Fuel taken, KMPL & other details

Fixed
Km/litr.

DATE	Coupen	Fuel	KMPL	Driver Name	Personal #

Show Details Report CLEAR EXIT

Total Fuel = ltrs.

Press this button to see fuel taken and kilometers travel in one liter.
Count *0

Enter Vehicle's Registration # & Dates

Registration #	Starting Date	Ending Date
[RIT-7011]	[02JUN-00]	[10JUN-00]

Fuel taken, KMPL & other details

Fixed
10.7 Km/litr.

DATE	Coupen	Fuel	KMPL	Driver Name	Personal #
03-JUN-00	3	13	3.85	AAMIR	00001 ^
04-JUN-00	4	11	10.5	AAMIR	00001
05-JUN-00	5	7	9.14	MUHAMMAD IRSHAD	00002
06-JUN-00	6	17	3.24	AAMIR	00001 v

Show Details

Report

CLEAR

EXIT

Total Fuel = 110 ltrs.

INVOICE FORM:

Quantity of petrol, diesel and different Oil purchased for vehicles can be check through this form.

Search _ | a | x

INVOICE RECORD FORM

Starting Date Ending Date Code

Invoice	date	Draft #	Quantity
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

INVOICE RECORD FORM

Starting Date | 10-JUN-00

Ending Date | 14-JUN-00

Code | S

INVOICE RECORD DETAIL FOR SUPER

Invoice	date	Draft #	Quantity
0505	10-JUN-00	456	200 ▲
234	11-JUN-00	555	100
333	12-JUN-00	444	200
444	13-JUN-00	2567	500
7576	14-JUN-00	33223	4000 ▼

SHOW

CLEAR

EXIT

PETROL AND DIESEL BALANCE:

SECOND SCREEN:

DESIGNED BY A.N. NAZI - [DAILY BALANCE IN UNDERGROUND TANKS]

Action Edit Block Field Record Query Window Help

LEDGER BALANCE OF PETROL & DIESEL

Date	Petrol	Diesel
11-JUN-00	14965	14000
12-JUN-00	14975	14000
13-JUN-00	14975	14000
14-JUN-00	14950	14000
15-JUN-00	13380	14000

MORE . .

EXIT

Count: 0

PETROL AND DIESEL BALANCE FROM 02-JUN-00 - 15-JUN-00		
<u>DATE</u>	<u>PETROL</u>	<u>DIESEL</u>
02-JUN-00	9900	9900
03-JUN-00	9100	9200
04-JUN-00	9000	9000
05-JUN-00	8800	8700
06-JUN-00	8500	8400
07-JUN-00	8200	8100
08-JUN-00	7870	7800
09-JUN-00	7600	7700
10-JUN-00		
11-JUN-00	14985	14000
12-JUN-00	14975	14000
13-JUN-00	14975	14000
14-JUN-00	14950	14000
15-JUN-00	13950	14000

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LUBRICANTS BALANCE:

FIRST SCREEN:

Daily closing balance of different Oil in store for different dates can be check through this form

DESIGNED BY A.N. MIAZI - [DAILY BALANCE IN UNDAER GROUND TANKS] - | | x

Action Edit Block Field Record Query Window Help - | | x

DAILY BALANCE OF LUBRICANTS

Starting Date	Ending Date
10-JUN-00	16-JUN-00

SHOW LEDGER Ledger Report

Enter Ending Date --- This date must be greater then starting date.
Count *0

LUBRICANTS BALANCE:

SECOND SCREEN:

DESIGNED BY A.N. NIAZI - [DAILY BALANCE IN UNDER GROUND TANKS]

Action Edit Block Field Record Query Window Help

LEDGER BALANCE OF LUBRICANTS

DAILY CLOSING BALANCE OF LUBRICANTS

Date	GTX	CRD 49	GTX Tin	DELO	TOTAL
12-JUN-00	100	100	100	100	100
13-JUN-00	196.5	200	200	200	200
14-JUN-00	300	300	300	300	300
15-JUN-00	400	400	400	400	400
16-JUN-00	500	500	500	500	500

MORE . .

EXIT

Count: *0

LUBRICANTS LEDGER FROM 10-JUN-00 TO 16-JUN-00					
DATE	GTX	CRD40	GTX TIN	DELO	TOTAL
10-JUN-00	93	100	100	100	100
11-JUN-00	89.5	100	100	100	100
12-JUN-00	100	100	100	100	100
13-JUN-00	196.5	200	200	200	200
14-JUN-00	300	300	300	300	300
15-JUN-00	400	400	400	400	400
16-JUN-00	500	500	500	500	500

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