

**COMPUTER APPLICATION IN CRIME CONTROL AND
PREVENTION WITH SPECIAL REFERENCE TO CAR THEFT**

***(A CASE STUDY OF NIGERIAN POLICE FORCE HEADQUARTERS
LAGOS STATE)***

By

KAOSARA OLUSHEKE ATANDA-LAWAL

REG NO PGD/MCS/714/97/98

A PROJECT SUBMITTED IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE AWARD OF THE POSTGRADUATE
DIPLOMA IN COMPUTER SCIENCE OF THE DEPARTMENT OF
MATHEMATICS AND COMPUTER SCIENCE FEDERAL
UNIVERSITY OF TECHNOLOGY, MINNA, NIGER STATE.

MARCH, 2000

CERTIFICATION

This is to certify that this project was carried out by KAOSARA OLUSHEKE
ATANDA-LAWAL in the department of Mathematics/Computer Science Federal
University of Technology, Minna, Niger State.

PRINCE R. O. BADMUS
Supervisor

Date

DR. S. A. REJU
Head of Department

Date

External Examiner

Date

DEDICATION

This project is dedicated to my husband ALFA KAMARDEEN AFOLABI-ADELEGAN. From whom much has been received and less has been given.

ACKNOWLEDGEMENT

Glory be to almighty Allah for His guidance and protection given to me throughout the course of study. ALIAMUDULILAH.

Am gratefully indebted to my supervisor PRINCE R.O. BADMUS for his patience and unflinching support, may Allah shower more of his blessings upon him and abundance of good will. Also to my H.O.D, co-ordinator, and entire staff of Maths/computer department.

I am equally grateful to my parents for their care, moral support and financial support that have brought me to this stage of my educational career .

My appreciation also goes to other members of my family includes Alhaji and Alhaja W.O Masha, Mr. and Mrs. Osipitan, Mr. Atanda-Lawal, Miss. Adelegan, Miss. Omotayo and Rasheedat.

I will also appreciate the efforts of my friends and Colleagues for their general support throughout the program Kazeem, Alfa Taofik, Folake, Kehinde and Fatima.

ABSTRACT

In the study to highlight the greed of stealing of vehicles and curbing this various act in our environment, the Nigeria police has chosen as a case study modern. It was find that the entire force needs overhauling as the present system of investigating and controlling the thief and robbery of vehicles have proved ineffective and lacking. Instead of curbing this act, it has rather created a thoroughly aggressive faction within our society, which uses its youthful disposition to threaten and destroy us all. The present campaign against vehicle switching by the police force would be an uneventful adventure without the immediate computerization of the mutual adopted in stopping and retrieving of information concerning stolen vehicles; without the computerization of this measures, the present cries will best be described as hoax.

In conclusion, the police would have to introduce a database system for timely and accurate information concerning stolen vehicle. The operation performed by this system includes addition of records, deletion of records and amendment of records. The database file is kept in a disk and assessed sequentially.

TABLE OF CONTENT

TITTLE PAGE	
CERTIFICATION	i
DEDICATION	ii
ACKNOWLEDGEMENT	iii
ABSTRACT	iv
TABLE OF CONTENT	v
CHAPTER ONE (INTRODUCTION)	
1.1 OVERVIEW	1
1.2 PROBLEM DEFINITION	1
1.3 AIM AND OBJECTIVE	2
1.4 IMPORTANCE OF THE STUDY	2
1.5 SCOPE	3
1.6 STUDY METHODOLOGY	3
CHAPTER TWO (LITERATURE REVIEW)	
2.1 DEFINITION OF CRIME	4
2.2 CATEGORIES OF CRIME IN NIGERIA	4
2.3 GENERAL VIEW OF CRIME DETECTION AND CONTROL	6
2.4 INVESTIGATION PROCEDURE	6
2.5 STOLEN VEHICLE	7
2.6 MODE OF OPERATION	8
2.7 CENTRAL CRIMINAL REGISTRY	8

CHAPTER THREE

3.1	AN OVERVIEW	9
3.2	FEASIBILITY STUDY	9
3.3	AN ANALYSIS OF THE EXISTING SYSTEM	10
3.4	PROBLEM ACCURABLE TO THE EXISTING SYSTEM	12
3.5	THE NEW SYSTEM	12
3.6	SYSTEM DESIGN	13
3.7	COST AND BENEFIT ANALYSIS	15

CHAPTER FOUR

4.1	BRIEF ON PROGRAMMING LANGUAGE	16
4.2	REASON FOR CHOOSING DBASE IV	16
4.3	SYSTEM REQUIREMENT	17
4.4	PROGRAM DESCRIPTION	18
4.5	PROGRAM IMPLEMENTATION	19
4.6	PROGRAM DOCUMENTATION	20
4.7	PROGRAM MAINTENANCE	20

CHAPTER FIVE (SUMMARY, CONCLUSION AND RECOMMENDATION)

5.1	SUMMARY	22
5.2	CONCLUSION	22
5.3	RECOMMENDATION	22
	REFERENCE	23

APPENDIX

CHAPTER ONE

(INTRODUCTION)

1.1 OVERVIEW

It looks like criminals are taken over the country. They have succeeded in clamping over the citizen of this country, a force curfew. At present, lots of people have speculated that what we have may quickly degenerated into a full-blown urban guerrilla warfare. The situation now fits into recognizable patterns: there are seemingly senseless assassinations, cold-blooded murders, frequent vehicle snatching, armed robberies, arson, kidnapping and so on. The crime rate (especially rate at which vehicles are being stolen) is now at a critical level that even the president General Abacha, being so touched, handed out a directive to the police force to do something positive about the prevailing situation or he would let soldiers curb the menace.

The curbing of the crime rest upon the fragile shoulders of the Nigeria police force (NPF) which is the only force established by the law under the Nigeria constitution and having the responsibility throughout the federation for the protection of lives and properties of the citizens, the prevention and detection of lives and properties of the citizens, the prevention and detection of crimes, the apprehension of offenders, the maintenance of law and order as well as preservation of individuals liberty and the enforcement of all laws and regulations with which it is charged.

1.2 PROBLEM DEFINITION

The present method of keeping criminal record is still been handled manually in Nigeria police force. This manual method of keeping records is accompanied by lots of setback such lost of data, time consumption, inefficiency, human errors amongst other. There is

therefore the need to design, develop and implement a functional system that enhance the service rendered by the Nigeria police force.

1.3 AIM AND OBJECTIVE

The basic aim of the project is to improve the performance of the force and restoring public confidence in the police force by studying how this crime detected, various control measures and how some of these measure could be computerized to improve the performance.

The main objectives involved in this study are as follows

1. Design a system that will accurately keep on update record of crime
2. To eliminate or minimize the errors associated by the manual system.
3. To provide timely, accurate and reliable information for decision making in Nigeria police force.
4. Lost of valuable information associated with manual system of record keeping will be prevented by storing such information on a disk (being a very reliable storage medium).
5. To demonstrate the computers capability of solving problems.

1.4 IMPOTANCE OF THE STUDY

The study will be of great importance to N.F.A because it is envisage that at the end of this study, a functional, reliable and efficiency would have developed which will assist immensely towards achieving better result in the Nigeria police force. When fully implemented, the new system will greatly reduce the problem associated with manual system. The advantages that is going to be derived from the study also include the following:

- Improved efficiency
- Better management control
- There is going to be a enough accommodation for growth

- The acquisition of intelligent terminal that aids time sharing utility
- Reduction in abandonment of cases.

1.5 **SCOPE**

The project is mainly concern with the automation of crime control in Nigeria police force with greater emphasis on stealing on vehicles, which is daily increasing with greater violence and recklessness.

1.6 **STUDY METHODOLOGY**

There are several methods of gathering in informations, they include observations, records, searching, questionnaire and interview. The analysis approach to the investigation will influence the use of various methods.

CHAPTER TWO

(LITERATURE REVIEW)

2.1 DEFINITION OF CRIME (LEGAL AND SOCIOLOGICAL)

Since stealing of vehicle is a crime, one needs to know the basic definition of crime.

The legal definition of crime goes does :-

A crime is any act prohibited by public law for the protection of public and made punishable by the state in a judicial proceeding in its own name.

The sociological definition of crime is: A crime, in a general sense, implies any act done or committed in violation of public law and for which the person is liable to punishment by indictment.

However, there can never be a satisfaction definition of crime, for is always changing as society too changes.

2.2 CATEGORIES OF CRIME IN NIGERIA AS DEFINED BY N.P.F

By the police force classification, there are four main categories of recognized crime in this country, viz.:

(A) OFFENCES AGAINST PERSONS

1. Murder
2. Manslaughter
3. Attempted murder
4. Suicide
5. Attempted suicide
6. Grievous harm and wounds
7. Assaults
8. Child stealing

9. Slave dealing
10. Rape and indecent assault
11. Kidnapping
12. Unnatural offences
13. Other offences

(B) OFFENCES AGAINST PROPERTY

1. Armed Robbery
2. Demanding with menaces
3. Thefts and other stealing
4. Burglary
5. House Breaking
6. Store Breaking
7. False pretence and cheating
8. Forgery
9. Receiving stolen property
10. Unlawful possessions
11. Other offences

(C) OFFENCES NOT A AND B

1. Forgery of currency notes
2. Coining offences
3. Gambling
4. Breach of public peace
5. Perjury
6. Bribery and corruption
7. Escaping from lawful custody

8. Other offences

(D) TOTAL CRIME

1. Offences against local acts
2. Offences against traffic acts
3. Offences against township act
4. Offences against firearms acts
5. Offences against dog act

2.3 GENERAL VIEW OF CRIME DETECTION AND CONTROL

Stealing of vehicles either forcefully or otherwise is a particular crime which attention is being focused on. The police departments need highly trained individuals who can act intelligently and independently to the variety of ways armed robbers device to snatch vehicles. Apart from crime witness by officers, only those which are reported come to notice of the police for quick apprehension and prosecution of offenders. In order to control stealing of vehicles (which I will henceforth refer to as crime) by criminals and to prevent the commission of crime. It is quite necessary to find out circumstances in which crime is generated and the conditions conducive to the commission of unlawful or prohibited acts in any particular environment.

2.4 INVESTIGATION PROCEDURES

Investigation procedures adopted by the police force is the same for all categories of crimes including stealing of vehicles

There is a general relief when bandit – be they vehicle snatchers, murderers, rapists and so on are caught. The police are congratulated and public reinstate their confidence in the force thereby boosting the force's morale.

Whenever an offender is brought to book, not only is the forces ego boosted, public faith in the force is also strengthened. Police investigation is the arrest and prosecution of offenders. The apprehension process can be viewed as sequence of actions taken in response to the commission of crime. On receipt of a commission of crime, the scene of the crime is the first place the investigation officer visits and solution of any crime solely depends on evidence collected from the scene of crime.

Evidence is always present at the scene of any crime, no matter how careful the criminal(s) was/were. Because of this, crime scene should be protected from contamination. Evidence may be collected or photographed and investigation conducted with minimal interference's from persons not directly involved in the investigation.

Scientific analysis of fingerprints, weapon, footprint, blood stain and other traces quickens investigation procedures. Investigation procedures undertaken by police force for apprehension of criminal include:

1. Blood stain and laboratory services
2. Informants
3. Photographs

2.5 **STOLEN VEHICLE**

All record of all registered vehicles and license holders are sent to each state criminal investigation department from local government licensing office, so that record are kept of all vehicles in the jurisdiction. If for instance, the police is suspicious of any vehicle in the highway, he could radio the radio room, giving the registration number, make and colour of the vehicle and previously stored information about the suspicious vehicle will be supplied. This would enable the police to decide whether or not to intercept the driver.

2.6 MODE OF OPERATION

This is a system whereby criminals are grouped and classified into methods used to commit their crimes. All criminals are identified with pattern or mode of operation. It may be a special or unique way of breaking into house, shop or office either through the window, roof, side doors or main door or a special way of stealing vehicles. A proper identification of the method used by any criminal or gang is useful in tracking down the accused person(s). This method requires timely submission of case reports and other data to the classify methods used in the commission of crime.

If it happens that there are no suspects arrested in a case, the mode of operation might be used to draw up a list or number of likely suspects in the case. The codes for each criminal mode of operation are made by the central criminal registry (C.C.R) and used by state C.I.D and are indexed by the nature of crime committed.

2.7 CENRAL CRIMINAL REGISTRY

The central criminal register only keeps records of criminals. These are people who have been accused of crime. All state C.I.D send criminal records to the C.C.R and these record are stacked according to crime and when a particular state C.I.D wants information concerning a criminal, the C.C.R is contacted by telex, telephone, road or radio signal.

The C.C.R compiles all reports of crime from all over the country every year and it produces crime statistics, which is used in crime control and prevention.

CHAPTER THREE

3.1 AN OVERVIEW

The method of determining how best to use computer. With other resources to produce results which meet the information needs of an organization is known as system analysis. The system analysis has to work hand in hand with uses of the system and to ensure that the needs of the user are met. In system analysis and design, the actual problem has to be considered. If the wrong issues are addressed, the result will be a total failure. System analysis and design comprises a number of aspects such as problem definition, preliminary study, system analysis, system design, program acquisition, implementation and maintenance.

3.2 FEASIBILITY STUDY

It is essential to conduct a feasibility study prior the commencement of the proposed project.

This study determines whether the project is realistic in terms of time, cost and resources. This prevents the organization ending up with a wide elephant project and avoiding unnecessary wastage of valuable time effort and other limited resources. The objectives which the analyst the analyst hopes to accomplish at the end of the day are as summarised below.

a). Clarification and understanding the project request.

The will be the attainment of this project.

- What is being done?

- What is required

b). Determine the size of the project.

This is necessary, so as to estimate the amount of time and number of people required to develop the project

- c). Assessing costs and benefits of the alternatives approaches what is cost of the project including the cost of training and retraining end-users of the system
- d). Report the finding to management with recommendation outlining the acceptance or rejection of the proposal. In order to carry out the above, feasibility study as been sub-divided into three classes they are:

TECHNICAL FEASIBILITY: This is basically concerned with the availability of the required equipments, software and all other technology carryout the proposed system

OPERATIONAL FEASIBILITY: This relates to the workability of the proposed system fully developed. It considers the existence of adequate and skilled personnel to implement the project.

ECONOMIC FEASIBILITY: This is to clarified whether the ends which refers to the benefits to be derived from implementing the project would justified the means that is total cost to be expended in the cost of implementing the project.

In relating the propose study with all above project feasibility. If the result of testing shows that it is economical, then the project is considered feasible.

3.3 AN ANALYSIS OF THE EXISTING SYSTEM

Presently the activities relating to vehicle theft records are done manually. Statement of facts of a case made by an injured person is known as complaint. Any person who has become a victim of vehicle snatching, assault, burglary, rape or any crime whatsoever committed against him/her goes to the nearest police station to lodge the complaints in order to gear the police action so as to obtain a redress. This complaint is entered into a STATION DAIRY by the sergeant on duty at the counter. This dairy is considered the principal record book at every police post or station. Into it, all reported entries of complaints received at the

police station are entered. Also, there is the CRIME DAIRY which contains all reported or complained crimes received at the police station either by telephone call or in person, made to the sergeant on duty at the counter. If the complained however, cannot be handled by the police at the station or post, for example in a case where some of the occupant of a vehicle are murdered, it is referred to the criminal investigation department (C.I.D) for proper investigation.

Reported cases of armed robbery, homicide and rape are reported to police post or stations and handled by the C.I.D.

A CRIME BULLETIN is sent to the state C.I.D from all police stations or post attached to a particular zonal command within every twenty-four hours. As said, when a case is reported, it is first recorded into the STATION DIARY and if complaint names suspects, the suspects are arrested and kept in custody until investigation is completed or until BAIL is arranged.

Where suspect (s) or accused person (s) are detained, they are searched; their names, addresses and properties recovered from them are recorded in a PRISONERS LOCKUP and PROPERTY REGISTERS.

The reference serial number of such entries will be cross- quoted with the STATION DIARY/ CRIME DIARY. The case is then registered in the CHARGE REGISTER. The registration of case precedes the opening of CASE FILE.

A case file is a file which contains all facts and evidence about a complained or report made to the police of a crime or offence detected by the police and which has become a subject of investigation and probable prosecution. If a crime results in death, entries will be made in the SUDDEN AND UNNATURAL DEATH REGISTER and will be cross-referenced with the CHARGE REGISTER serial number.

All cases of fatal motor accidents are reflected in this register just as sudden deaths resulting from criminal acts and entries are properly cross referenced with the register of ROAD ACCIDENT

3.4 PROBLEM ACCURABLE TO THE EXISTING SYSTEM

The existing system through cheap and cost effective in the long run and has quick error handling procedure is however plagued with problems. Among the various problems are.

- (1). The system involves overtime, the generation of large value of papers to be kept, thereby occupying a lots of cabinet and floor space.
- (2). Assessing past information from the existing system is tedious, frustrating and time consuming.
- (3). There exist lack of data security and integrity as past records could easily be destroyed or misplaced.
- (4). Uneasy accessibility to past data make forecasting and planning almost impossible.
- (5). Proximity to errors of omission or commission

3.5 THE NEW SYSTEM

The propose system is basically a computer automation. Simply put, the computer is made up of electronic devices that can accept data as input, processes to give out information or output. It comprises of input, processing an output unit.

To effect the propose automation, a changeover procedure would have to be employed. The common methods of changeover available include direct, parallel, pilot and staged changeover.

However for this study, parallel changeover is recommended. This will involve running both old and new systems concurrently for at least one system cycle using full live

data in the operational environment of place, people, equipment and time. This allows for the result of the new system to compare with old system before the full acceptance by the force.

3.6 **SYSTEM DESIGN**

Given the required specification of the proposed, system, this now has to interpreted to create a design of a programming system which will satisfy these requirement. Perhaps the purpose of system design is best explained by the end product that mark its completion. This step concludes with the acceptance of a document called system specification. This is a description that cover in details to satisfy both management and users of the results and methods to be incorporated in the new system design.

System design become more meaningful when discussed along side the five design component which are

1. input
2. output
3. files
4. procedure
5. people

(1) **INPUT:** Input refers to the mode of entering data into the system. It is basically influenced by the needs of the output. Consideration should be given to:

Data collection method and validation;

Types of input media available;

Volume of input document;

Design of input layout.

The overall objective is to employ an input device that has the highest level of accuracy and is acceptable and understood by the users. The input design element to employed in this study will be the keyboard and disk drive.

(2). OUTPUT: This refers to the end product of the data processing that is, the information degenerated by the system. It is necessary to consider what is required from the system before deciding on how to go about producing it.

(3). FILES: this design element is very much linked to input and output. Input is processed against files to produce the necessary the output. Consideration on involved undesigning files is:

1. Storage media;
2. Method of file organization and assess;
3. Files security;
4. Record layout;

(4). PROCEDURES: This provides the operational details of the system in a stepwise. It may be given as a simple algorithm, pseudocodes, flowchart or programming.

(5). PEOPLE: The success of the proposed system depends on how involved users are with the design of the system. It is critical that the application development team identifiers with the personnel required to implement the new system.

3.7 COST AND BENEFIT ANALYSIS

Development cost

5 new PC at 60, 000	300, 000
1 printer (laser jet)	45,000
2 Airconditional at 45, 000	90, 000
1 stabilizer	15, 000
1 scanner	28, 000
Staff training	80, 000
Software	80, 000
Installation cost	15, 000
Miscellaneous	10, 000
	633, 000

OPERATIONAL COST

ups	16, 800
Diskettes	5, 000
Stationeries	23, 000
Furniture	30, 000
Fax modern with voice	5, 000
	52, 000

Total cost analysis = Development cost

+ Operational cost

Total cost analysis = 685, 000.

Benefit Analysis

- i. The large volume of data from the various units, sector and zonal commands can be handled easily.
- ii. Easy accessibility to past data make forecasting and planing simpler
- iii. Data security and protection will ensure.
- iv. Data can be processes faster than was formally done.

CHAPTER FOUR

4.1 BRIEF ON PROGRAMMING LANGUAGE

Programming is the act of writing programs. A program is a sequence of instructions informing the computer on the steps required to achieve a defined task. There are basically two classes of programming languages: the low and the high level languages. Low level languages refers to those that involve the use of binary digits or mnemonic codes and symbols for their development, that is, they involve the use of computer language. High level languages on the other hand, are those developed using natural languages like English. When speaking of programming languages, the high level languages are often implied. There exists a lot of programming languages to suit different needs, examples are Fortran and Pascal languages for scientific purposes, Cobol and Dbase for commercial and basic language for general purposes.

4.2 REASONS FOR CHOOSING DBASE IV

Dbase IV is often referred to as one of the most popular and powerful Database management system available for personal computer. It is ideal for present study in view of its simplicity to new computer users and its ability to handle the large database of the organization. Some other features that make database iv are as follows:

- 1). Preferable to other version of dbase due to the improvement it contains among which the availability of full relation database capability using structured query language that is compatible with IBM machines;
- 2). Its simplicity makes it preferable to other relation database system like the ORACLE. It is easy to learn and use.
- 3). Accessibility to as many as ninety – nine files at once.
- 4). Has up to 255 fields per record.

- 5). Allows for pop-up menus and window design.
- 6). Can handle large memory variable

4.3 **SYSTEM REQUIREMENT**

The proposed internal control system will require personal computers with the following specifications.

A). **HARDWARE REQUIREMENT**

- 1). **PROCESSOR:** A minimum of 286 processors
- 2). **MEMORY:** - At least 2 megabytes of Random Access memory (RAM)
- 3). **STORAGE CAPACITY:-** A minimum of 4.5 MB
- 4). **DISPLAY:-** A coloured monitor
- 5). **INPUT DEVICES:-**
 - (a). **Disk drive:-** 3.5" floppy disk drive
 - (b). **KEYBOARD :-** Standard keyboard (IBM)
- 6). **PRINTER:-** HP desk jet 895 cxi
- 7). **POWER SAVER:-** 650 KVA ups.
- 8). **STABILIZER:-** OF UP TO 1000V

(B). **SOFTWARE REQUIREMENT**

- 1). **Dbase iv** package.
- 2). **Microsoft** disk operating system.

4.4 PROGRAM DESCRIPTION

To access the program, insert the floppy diskette containing the program into the disk drive. Then change directory to the dbase directory and type the file name that is

Set default to A

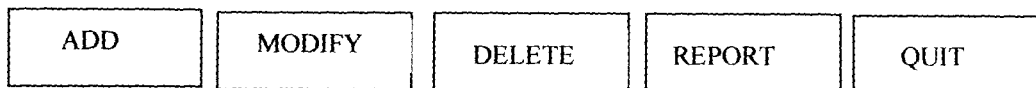
Type "cd Dbase

A > : cd Dbase

Type " Do REPORT - DBF

An introductory message is displayed. After which is screen clears and a menu screen REPORT.DBF is seen as shown below.

REPORT. DBF



On highlight any of options a sub-menu comes into view.

If Add is highlighted a sub-menu, sub add appears. Highlighting sub add allow one to add more records to the main database.

If Report is selected another pull down menu with options stolen, recover, all records and exit comes into view. Selecting stolen allow one to know the total number of stolen vehicles, selecting recover allow one to know the vehicles that has been recovered while selecting all records displays records of all vehicles stolen and recovered. However, selecting exit take us back to the main menu.

4.5 PROGRAM IMPLEMENTATION

This encompasses the activities needed to get the system ready for use. It involves establishing all computers related requirement are in place before the system becomes operational.

The main activity is the preparation and testing of programs for the new system.

The methodology employed here (our case study) is the coding of programs into section or modules. Each module are testing as it is written. As connecting modules are completed, testing extended to sets of module and eventually the entire program.

Other implementation activities embarked upon the performance of complete system test after the program is readily. This is the actual operation of the computer system by the users and the analyst using real application data. The data used had however been processed previously under the existing system and the result already known from previous processing. This serve to ensure that the users understand and are satisfied with the steps involved are as follows.

-Preparation of an implementation scheme;

-Preparation and presentation of management briefing in order to educate and train staff on the new system;

Getting and installing the specified software.

Design the required software.

Documenting all instructions for the use of the new program for the users.

Perform complete system test and establish new procedures.

Plan and organize the conversion.

Handover the system to users.

Supervision from time to time.

4.6 **PROGRAM DOCUMENT**

This is the process of describing the way the program works. There are two forms of documentation external and internal.

External documentation refers to explanation given about the working of the program, often printed out as reference manuals.

Internal documentation refers to comments inscribed within the program to describe what is happening at a particular time. This method is employed more in the development of the software for this study. This was to make it possible for any other programmer to be able to understand the program so as to carry out modifications as at when due.

Effort was also made to ensure that the documentation's are readable and the language very simple : To promote better communication within the organization it is recommended that professionals henceforth use the same stanstard for design and documentation.

Finally enhancement of a program is a requirement built into the very nature of computer systems. As soon as a new system becomes operational, it is usually soon subjected to modifications either to meet new regulations or to capitalise on newly discovered opportunities. An undocumented program would soon be redundant as it would be unable to do this.

4.7 **PROGRAM MAINTENANCE**

Maintenance begins as soon as the system becomes operational and last long as it is in use, meet needs or provides enhance value for the existing systems. Some of the steps to be taken in order to maintain the system include:

-Putting procedure in place to guard against both misuse and obsolescent of programs and supporting documents once the system has been handed over;

- Establish and maintain record for every disk or tape kept within the data library.
- Ensuring that source programs are checked out to only authorised people who must account for everything they do to the program. Any changes must lead to amendment of the master and distributed copies of code documentation and manuals.
- Hardware peripherals should be well maintenance as specified in their manufacture's manual

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATION

5.1 SUMMARY

The computational implementation of crime control in the Nigeria police force is designed in a way that involves the use of the computer in keeping an update record of vehicle in N.P.F.

The crime control is analysed and designs critically. This project focuses on the nature and purpose of the existing system, its setbacks, scopes for improvement, preferred solution and recommended design approach, its merit and limitations

The programming work was carried out, the expected result has been obtained and the desired report production.

5.2 CONCLUSION

Having examined the existing procedure and established system in the crime control of the Nigeria police force, the usual forthcoming associated with the manual system i.e. errors prone, loss of data and slow speed of operation among others have been minimized if not totally eradicated.

5.3 RECOMMENDATION

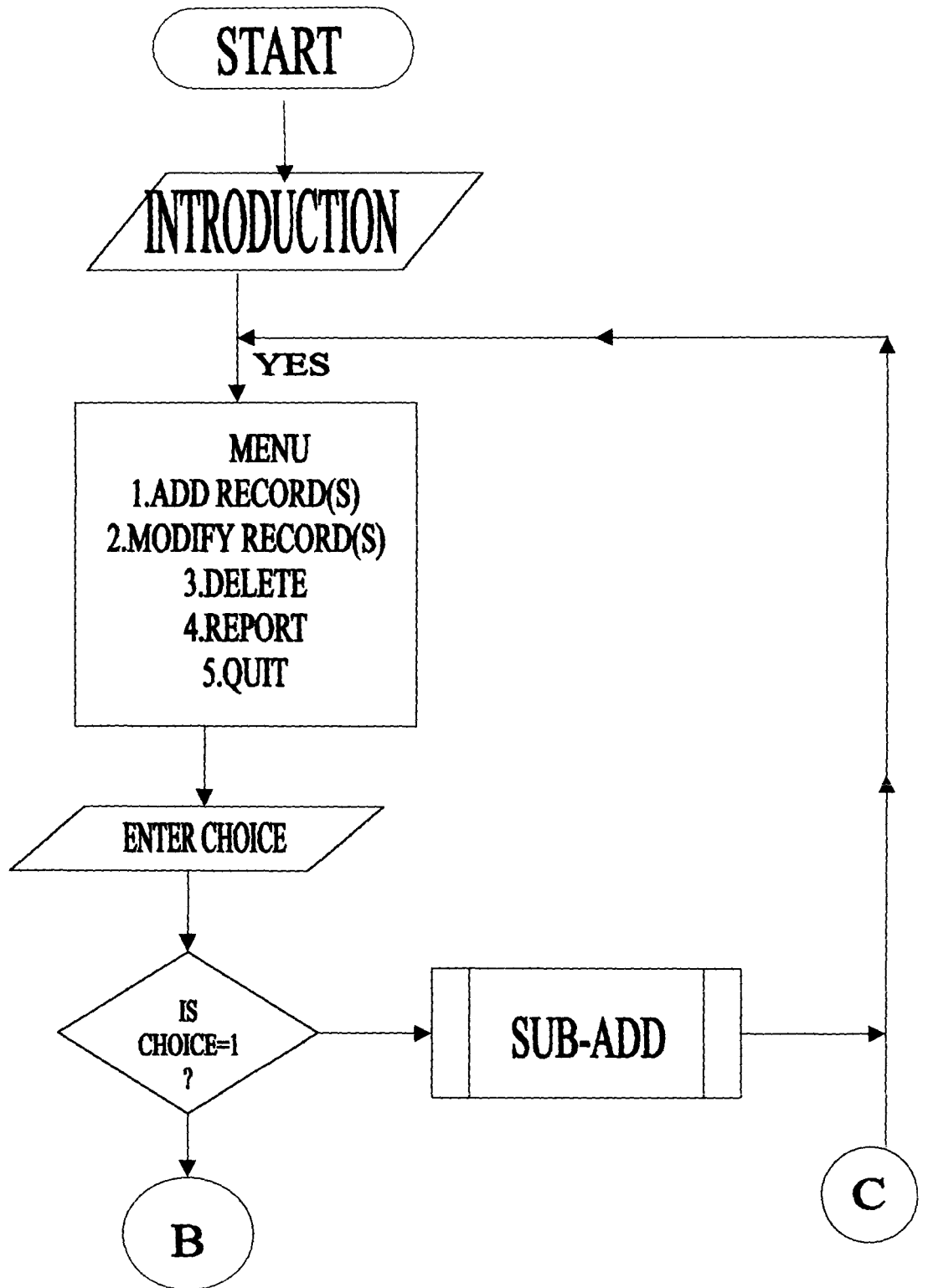
To eradicate some of the problems above, a large computer system will be used so as to store more information. Nigeria cannot wait until she attains the height to manufacture computers before using them. To do so would be tantamount to reinventing the wheel of progress. The necessary computer technology is available now and all that needs to be done is to apply it properly. The purpose of a computer is reasonable enough that money, though currently in short supply, should be allocated to obtain them. Their capabilities have improved to the extent that a computer that fits on a desktop, all that has been enumerated here and a lot more.

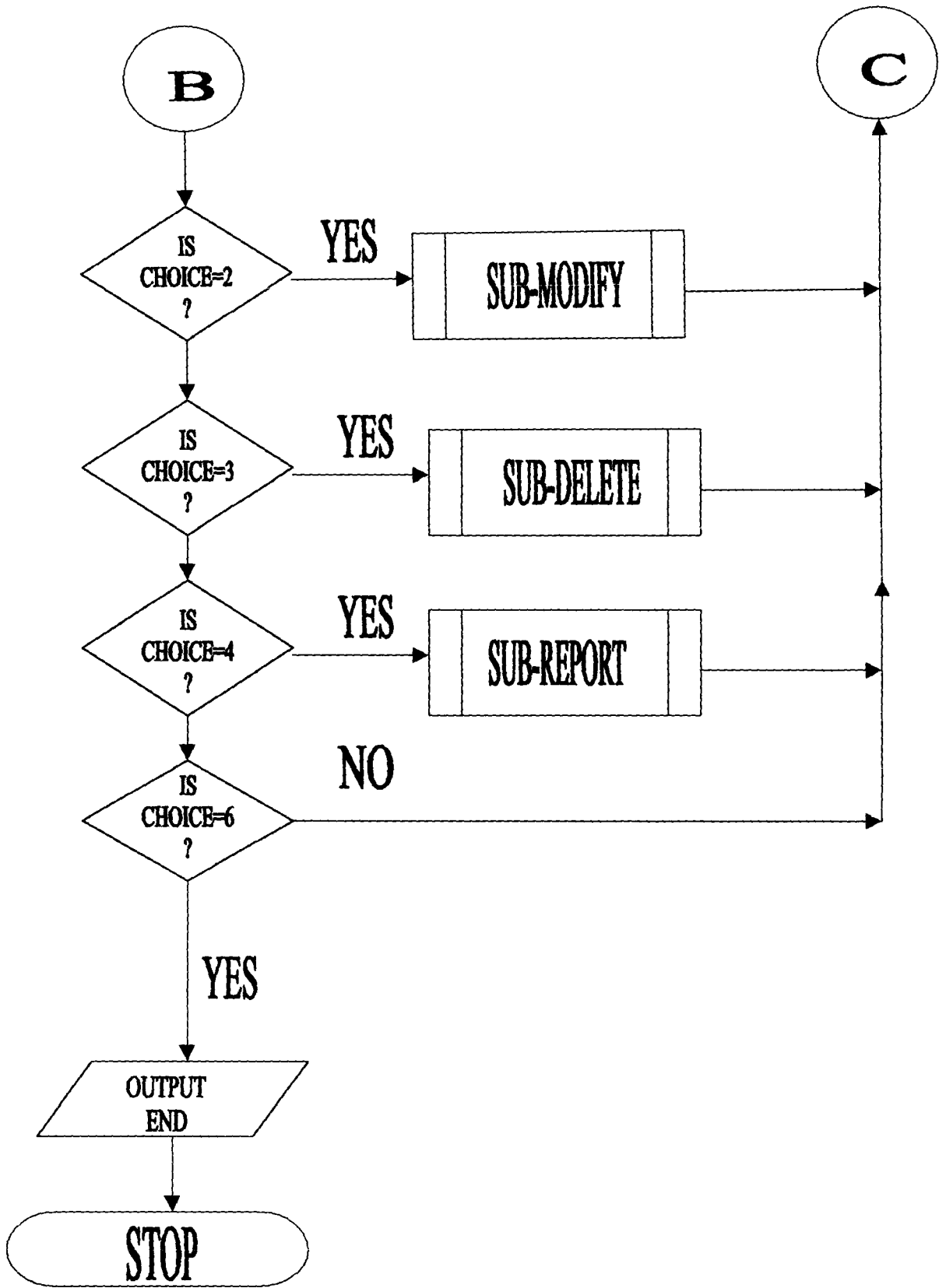
REFERENCES

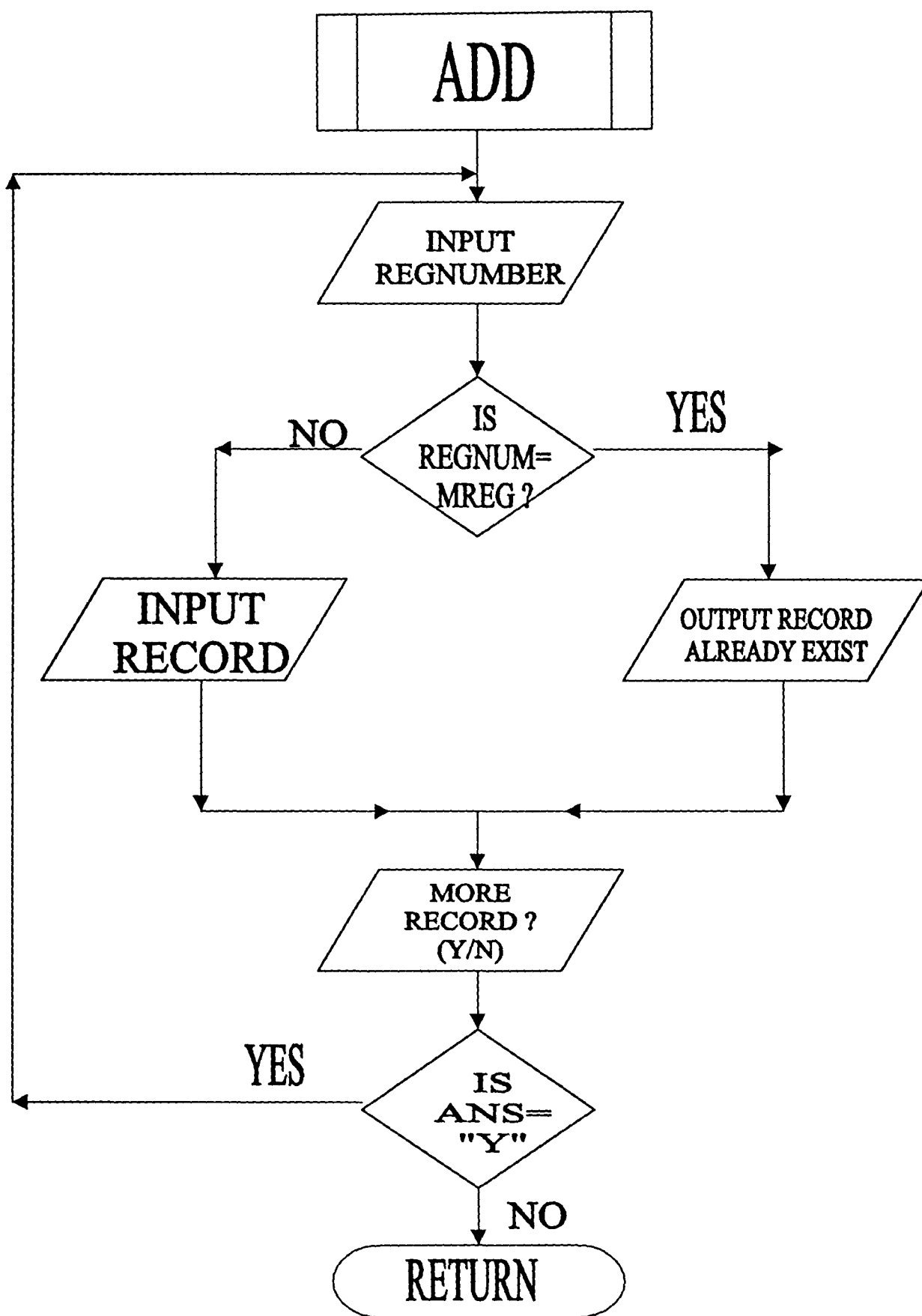
1. Badmus R. O. (1998) Introduction to Computer. F.U.T. Minna.
(Unpublished lecture note)
2. Kola .A. (1998) Computer Programming Made Easy.
F.U.T. Minna.
(Unpublished lecture note)
3. Larry L. (1984) Introduction to Computer and Information
Processing. Prentice-Hall, Inc.
4. Marshal N.L.S (1986) The Legal Definition of Crime and
Criminals. Sweet and Maxwell.
5. Snyoer, F. (1987) Labour, Law and Crime: An Historical
Perspective.
Tavistock Publication Ltd.
6. Manuals from the Police Force Headquarters Lagos State (1995)
(Unpublished)
7. Stanley Rothman and Charles (1979) Computer and Society. Richard D. Irwin

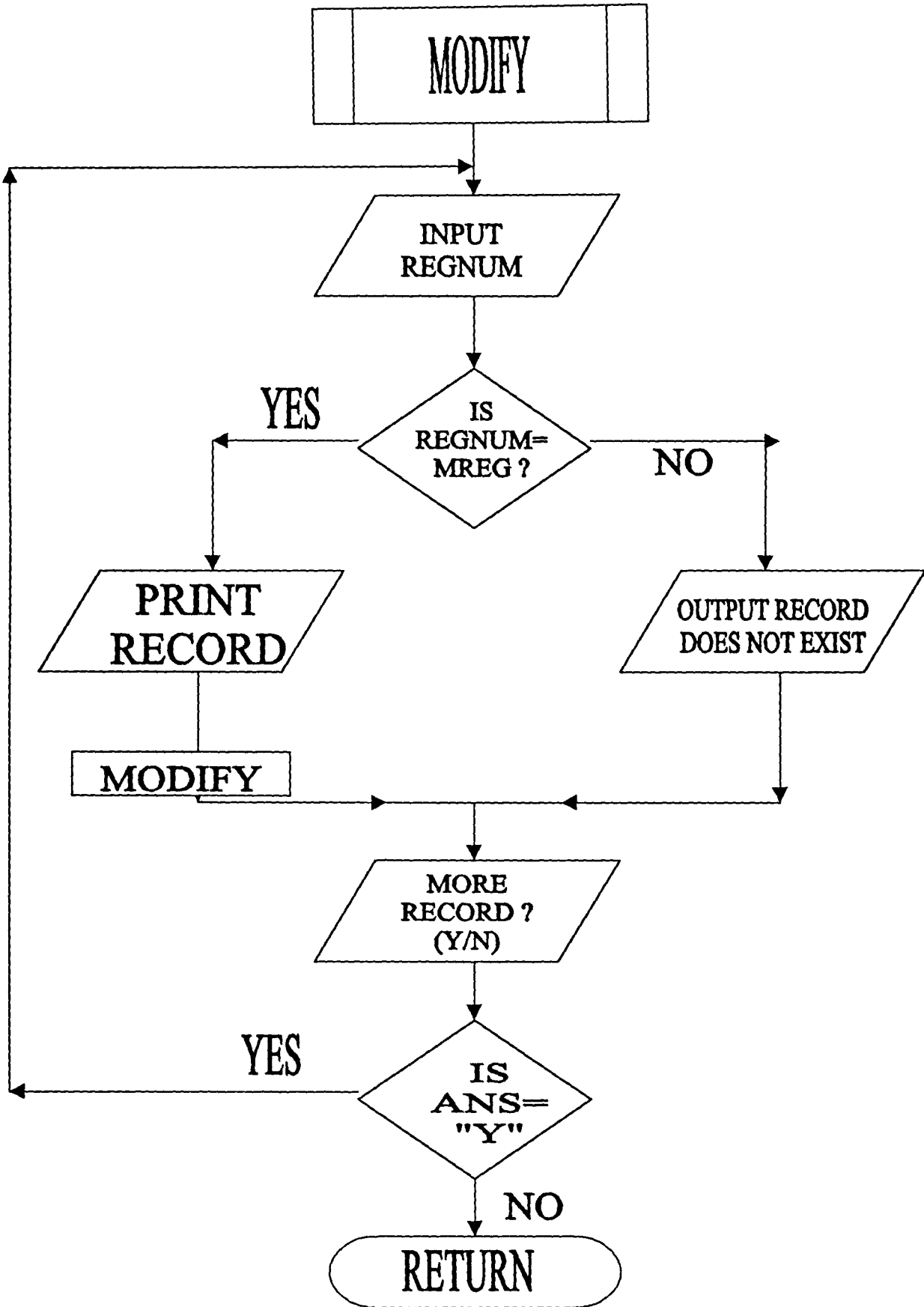
APPENDIX

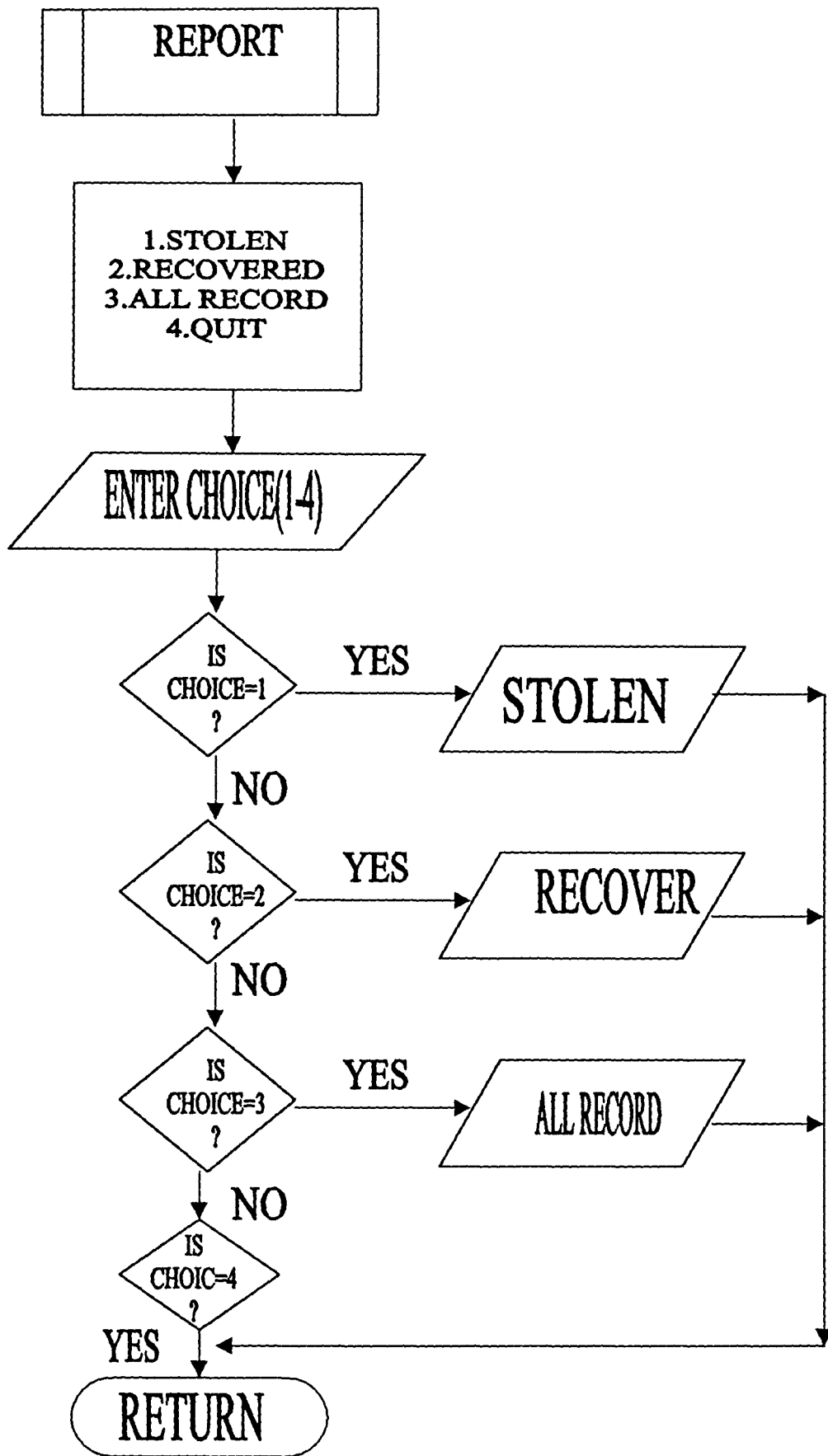
FLOW CHART











Program codes

```
*****
□
* PROGRAM NAME: MAIN.PRG          *
□
* WRITTEN BY: Atanda-lawal Kaosara S. *
□
* dBASE SER:IV                    *
□
*****
□
* Set up environment
□
CLEAR ALL
□
SET STATUS OFF
□
SET TALK OFF
□
SET EXACT OFF
□
SET BELL OFF
set safety off
set date to brit
set confirm on
SET DELIMITERS OFF
SET SCOREBOARD OFF
SET ESCAPE ON
SET CLOCK ON
public mnane, mad_1, mad_2, mad_3, mrgna, mchna, mawsa, cc
public mtwsa, mswsa, mtmsa, mhwsa, mdtsa, mdrsa, mcaca, mmkma, mrema
public gn_sent

*Define popup
Do Menu_def

*Display menu and loop for choice
DO WHILE BAR() <> 11
DO TITLE
ACTIVATE POPUP mainmenu
ENDDO
CLOSE ALL
CLEAR
RETURN &&----- END MAIN PROGRAM -----

PROCEDURE TITLE
@ 0,17 to 4,64 DOUBLE
@ 1,19 SAY" COMPUTERIZED STOLEN VEHICLE SYSTEM"
@ 3,19 say"====> program written by: sheke <===="
RETURN

Procedure regi_prg
use report
cc = reccount()
reply = "Y"
do while reply = "Y"
```

```

do spac_var
use report
index on rgna to report
cc = cc + 1
do title
@ 3, 19 say "=====> DATA ENTRY SECTION <====="
@ 5,21 say "Registration Number:" get mrgna pict '@!X';
valid .not. (seek(mrgna)) error" <Record already exist >"
read
if (.not.(seek(mrgna)) .and. mrgna # space (15))
do get_data
read
mrema = "S"
append blank
do repl_rec
end if
close databases
reply = "N"
@ 12,18 to 14,63
@ 13,20 say"Any more record to be registered? (Y/N)" get reply pict'!';
valid reply $ "YN" error"YN" error" <Press Y for Yes and N for NO>"
read
enddo
return

```

```

Procedure modi_prg
reply ="Y"
do while reply = "Y"
use report
index on rgna to report
do spac_var
do title
@ 3,19 say"=====> MODIFICATION OF RECORD<====="
@ 5,21 say "Registration Number:"get mrgna pict '@!X';
message "Registration no to be modified or ESC to exis";
valid (seek(mrgna)) error "Record does not exist"
read
if seek (mrgna))
do fiel_var
cc = reyno()
do get_data
@ 21,21 say "Remark (R/S): "get mrema pict'!';
valid mrema $ "RS" error"<Enter appropriate option >"
read
do repl_rec
end if
close databases
reply = "N"
@ 12,18 to 14, 63
@ 13, 20 say "Any more record to be modified? (Y/N)" get reply pict'!';
valid reply $ "YS" error" < Press Y for YES and N for NO >"
read
enddo
return

```

```

procedure dele_prg
reply = "Y"

```

```

do while reply ="Y"
use report
index on rgna to report
do spac_var
do title
@ 3,19 say"=====> DELETION OF RECORD <====="
@ 5,21 say "Registration Number:" get mrgna pict '@!X';
message "Supply the registration no to be deleted or press ESC to exist";
valid (seek(mrgna) .o. readkey()=27)error "Record does not exist"
read
if sek(mrgna)
@ 9,28 to 11,53
reply = "N"
@ 10,30 say "Are you sure? (Y/N)" get reply pict '!';
valid reply $ "YN" error "Press Y for YES and N for NO"
read
if reply = "Y"
dele
pack
endif
endif
close databases
reply = "N"
@ 12,18 to 14,63
@13,20 say "Any more record to be deleted? (Y/N) " get reply pict '!';
valid reply $ "YN" error"<Press Y for YES and N for NO>"
read
enddo
return

```

```

Procedure get_data
@ 0,17 to 22,64 doub
@ 4,17 say chr(199) + replicate(chr(196),46) + chr(182)
@ 23,34 say "Record #" + str(cc,6)
@ 6,21 say "Name of customer:" get mname pict '@!X'
@ 7,21 say "First Address:" get mad_1 pict '@!X'
@ 8,21 say "Second Address:"get mad_2pict '@!X'
@ 9,21 say "Third Address:" get mad_3 pict '@!X'
@ 10, 21 say "Engine no.:" get mchna pict '@!X'
@ 11,21 say "Charsis no.:" get mchna pict '@!X'
@ 12,21 say "Area where stolen:" get mawsa pict '@!X'
@ 13,21 say "Town where stolen:" get mtwsa pict '@!X'
@ 14,21 say :State where stolen:" get mswsa pict '@!X'
@ 15,21 say "Time stolen:" get mtmsa pict '@!X'
@ 16,21 say "How (Robbery / Theft):" get mhwsa pict '@!X'
@ 17,21 say "Date stolen:" get mdtsa pict '99/99/99'
@ 18,21 say "Date reported:" get mdrsa pict '99/99/99'
@ 19,21 say "Car color:" get mcaca pict '@!A'
@ 20,21 say "Make / Model:" get mmkma pict '@!X'
return

```

```

Procedure printset
define popup saveprn from row(),50
define bar 1 of saveprn prompt "send output to..." skip
define bar 2 of saveprn prompt replicate (chr(196), 24) skip
define bar 3 of saveprn prompt "CON: console";
message "< send output to screen >":

```

```

define bar 4 of saveprin prompt "LPT1 : parallel port 1";
message "< send output to LPT1 >"
define bar 5 of saveprin prompt "LPT2: parallel port 1";
message"< send output to LPT2>"
define bar 6 of saveprin prompt "COM1: seria port 1";
message"< send output to COM1 :seria port";
define bar 7 of saveprin prompt "FILE = report.txt";
message "< send output to file report,txt>"
on selection popup saveprin do get_sele
activate popup saveprin
release popup saveprin
if gn_sent = 7
set alternate to report.txt
set alternate on
else
if.not.(gn_sent = 3 .or. lastkey() = 27)
temp = wubsr(' LPT1LPT2COM1',((gn_sent-2)-1*4,4)
set printer to &temp
endif
endif
return

```

Procedure get_sele

```

*----- get the user selection & store BAR into variable
gn_sent = BAR()
deactivate popup
return

```

Procedure output 1

```

parameters comm 1, comm 2
use report
index on rgna to report
do spac_var
do title
@ 3,19 sqay"=====> ACCESSING OF RECORD<====="
@ 5,21 say "Registration Number:' get mrgna pict '@!';
message "Supply the registration no to be deleted or press ESC to exit";
valid (seek(mrgna) .or. readkey()=27) error "Record does not exist"
read
if seek(mrgna)
if rema = comm1
clear
if rema = "S"
mrema 2 = "Stolen "
else
mrema2 = "Recovered"
endif
? space (15) + chr (213)+ replicate (chr(205), 48) + chr (184)
? space (15) +chr (179)+ '      COMPUTERISED STOLEN VEHICLE SYSTEM
'+chr(179)
? space (15) +chr (179)+' APPLICATION PACKAGE ON STOLEN VEHICLE SYSTEM
'+chr(1760)
? Space (15)+chr(199)+replicate(chr(205),48)+chr(181)
? space (15)+chr(179)+'Registration Number:'+rgn +space(10)+chr(179)
? space (15)+chr(199) "Owner's name ""+name+space(5)+chr(179)
? space (15)+chr(179)+"Address-1  :'+ad_1+chr(179)
? space (15)+chr(179)+"Address-2  :'+ad_2+chr(179)

```



```

? space (15)+chr(179)+'Address-3 :'+ad_3+chr(179)
? space(150+chr(179)+'Engine Number :'+ egna+space(10)+chr(1790
? space(15)+chr(179)+'Chasis Number :'=chna +space(5)+chr(179)
? space(15)+chr(179)+' Area where stolen :'+awsa+space(5)+chr(179)
? space(150+chr(179)+' Town where stolen :'+awsa+space(5)+chr(179)
? space(15)+chr(179)+' State where stolen :'+swsa+space(10+chr(179)
? space(15)+chr(179)+' Time stolen :'+tmsa+space(10)+chr(179)
? space(15)+chr(179)+' How (Robbery/Theft): '+hwsa+space(10+chr(179)
? space(15)+chr(179)+' Date stolen (DD/MM/YY)
: '+dtoc(dtsa)+space(12)+chr(179)
? space(15)+chr(179)+' Car color :'+caca+space(15)+chr(179)
? space(15)+chr(179)+'Make/Model :'+mkma+space(10)+chr(179)
? space(15)+chr(179)+' Remark (R/S) :'+mrema2+space(16)+chr(179)
? space(15)+chr(192)+replicate(chr(196),48)+chr(217)
?

```

```

set alternate off
wait "Press Any Key To Continue" to nothing
else
define window win_rec from 12,23 to 15,57
activate window win_rec
@ 0,1 say "The car gas '+comm2+ 'been recovered'
wait 'Press Any Key To Continue' to nothing
deactivate window win_rec
release window win_rec
endif
endif
close databases
return

```

```

procedure output2
do title
@ 3, 19 say" =====> ACCESSING OF ALL RECORDS(s) <=====
?
replicate('-',79)
? "S/N Regist. No. Owner's name
?? "Engine No. Car color Remarks"
? replicate('-',79)
use report
stoire 0 to sn
do while .not.(eof())
sn = sn + 1
? str (sn,3), rgna,"
?? name, egna,"
??caca, rema
skip
enddo
close databases
? replicate('-',79)
?
set alternate off
wait "Press Any Key To Continue" to nothing return

```

```

PROCEDURE Menu_def
* Defines the main popup menu
define POPUP mainmenu FROM 6,27
define bar 1 OF mainmenu prompt "=====> MAIN MENU <=====" skip
define bar 2 OF mainmenu prompt replicate(chr(205), 25) skip

```

```

define 3 OF mainmenu prompt " R_ Registration";
message "Registration of stolen car(s) "
define bar 4 OF mainmenu prompt " M_ Modification";
message "Modification of registered car(s) "
define bar 4 OF mainmenu prompt " D_ Modification";
message "Deletion of record(s) "
define bar 5 OF mainmenu prompt "=====> REPORT <=====" skip
define bar 6 OF mainmenu prompt " S_stolen";
define bar 7 of mainmenu prompt " S_Stolen";
message "To access the registered stolen car(s) "
define bar OF access mainmenu prompt " C_Recovered";
message "TO access the registered recovered car(s) "
define bar 9 OF mainmenu prompt " A_All records(s)";
message "TO access all registered car(s) "
define bar 10 of mainmenu prompt"=====" skip
define bar 11 mainmenu prompt " Q Quit";
message "quit from the application package of stolen vehicle system"
on selection popup menu main menu DO GET MAIN
Retu
PROCEDURE get-main
*execute case depending on user`s choice
DO CASE
CASE BAR()=3
Dregi-prg
CASE BAR()4=4
DO modi-prg
CASE BAR()=5
DO dele-prg
CASE BAR()=7
do print set
do output with "R", "not"
CASE BAR()=9
DO PRINTSET
DO OUTPUT2
CASE BAR()=11
DEACTIVATE POPUP
END CASE
DO TITLE
RETURN

```

```

procedure spac_var
store space(20) to mname
store space(25) to mad_1
store space(25) to mad_2
store space(25) to mad_3
store space(15) to mrgna
store space(15) to megna
store space(15) to mchna
store space(20) to mawsa
store space(15) to mtwsa
store space(15) to mtmsa
store space(15) to mhwsa
store ctdo(` / / `) to mdtsa
store ctdo(` / / `) to mdrsa
store space(10) to mcaca
store space(15) to mmkma
store space(1) to mrema

```

return

```
procedure fiel_var
store name to mname
store ad_1 to mad_1
store ad_2 to mad_2
store ad_3 to mad_3
store rgn to mrgn
store egna to megna
store chna to mchna
store awsa to mawsa
store twsa to mtwsa
store aswa to mswa
store tmsa to mtmsa
store hwsa to mhwsa
store dtsa to mdtsa
store drsa to mdrsa
store caca to mcaca
store mkma to mmkma
store rema to mrema
return
```

```
procedure repl_rec
replace name with mname
replace ad_1 with mad_1
replace ad_2 with mad_2
replace ad_3 with mad_3
replace rgn with mrgn
replace egna with megna
replace chna with mchna
replace awsa with mawsa
replace twsa with mtwsa
replace aswa with mswa
replace tmsa with mtmsa
replace hwsa with mhwsa
replace dtsa with mdtsa
replace drsa with mdrsa
replace caca with mcaca
replace mkma with mmkma
replace rema with mrema
return
```

□

7:25:40 am

 COMPUTERIZED STOLEN VEHICLE SYSTEM
 APPLICATION PACKAGE ON STOLEN VEHICLE SYSTEM
 =====> ACCESSING OF ALL RECORD(S) <=====
#####

S/N	Regist. No.	Owner's name	Engine No.	Car color	Remarks
1	1000	BOLA ANIGILAJE	KD 347 KY	RED	S
2	1001	OLUWALANBE OYELAGBA	LA 2444 JJ	BROWN	S
3	1087	CHARLES ELELE	BD 1027 K	BLACK	S
4	1098	VICTOR OLAGUNJU	BD 3378 N	WHITE	S
5	2000	AMOLEGBE BOLANLE	LA 2000 SA	WHITE	S
6	1006	FRANCA WILLIAMS	LA 8123 FX	BLUE	S
7	1002	CHARLES KOLAWOLE	BD 2017 BF	BROWN	S
8	1003	OLUSOJI FOLAYAN	KW 3532 E	SKYBLUE	S

Press Any Key To Continue

