# COMPUTERIZATION OF PUBLIC COMPLAINTS COMMISSION'S RECORD SYSTEM

(A CASE STUDY OF NIGER STATE PUBLIC COMPLAINTS COMMISSION)

BY

# ABUBAKAR BALA GARBA PGD/MCS/187/96.

A PROJECT SUBMITTED TO THE DEPARTMENT OF

MATHEMATICS, STATISTICS AND COMPUTER SCIENCE,

FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA.

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE

AWARD OF POST GRADUATE DIPLOMA IN COMPUTER SCIENCE.

### **DEDICATION**

This work is dedicated to my loving parents Alhaji Umaru Garba and Hajiya Adama Garba, Zainab Garba, Mairo Garba and Sadiya Garba. brothers and sisters of Alhaji Umaru Garba's family in general.

### **CERTIFICATION**

We certify that we have read through this p	roject and that is the origina
work of Abubakar Bala Garba. It conforms with the s	standard for the award of pos
graduate diploma in computer science.	
PROJECT SUPERVISOR (DR. S. A. IWA REJU)	DATE
HEAD OF DEPARTMENT (DR K.R. ADEBOYE)	DATE
EXTERNAL EXAMINER	DATE

#### **ACKNOWLEDGEMENT**

First I would like to thank the Almighty Allah for giving me the will, determination and guidance to complete this work. I am most grateful to my loving parents, brothers and sisters for their moral and financial support throughout the duration of this programme.

To my supervisor DR. S.A Iwa Reju I am highly indebted for his meticulous supervision and guidance to put me through to the end of this project work. I am also grateful to the head of department as Dr. K.A. Adeboye and the course coordinator Prince R.O. Badamosi and all the staff of the departmen\* for their contribution to this noble objective.

Furthermore, I sincerely appreciate with thanks and to acknowledge the contribution of Mallam M. Z. Usman, assistant director of investigation, Mallam Shehu Umar principal investigation officer, Muhammed Aliyu Tauheed (Mankus) senior investigation officers Mallam Muhammed Garba personnel officer and Rakiya Garba as well as all the staffs of the public complaints commission.

Finally to my relations Garba's family, uncle Alhaji Sule Garba, Jummai Zainab Garba, Danlami Mohammed Garba, Usman Garba, Tanimu Garba and Bala Beji Garba especially those that shown me absolute love and affection which combine together to make my task easier for me, I say thanks all.

#### **ABSTRACT**

For an efficient complaint administration in any organisation public complaint computerization is very important. A computerized system of complaints will go along way in alleviating the problem associated with the present manual system being operated like misplacement of files or missing of some vital information from the complaints files.

A computer program is developed to take care of the following problems as indicated above. A program is written in Dbase IV which provides good facilities for a more scientific approach to the solutions for the complaint's records.

### **TABLE OF CONTENTS**

	TITLE PAGE	۱.
	DEDICATION	.ii
	CERTIFICATION	iii
	ACKNOWLEDGEMENT	iv
	ABSTRACT	٧
	TABLE OF CONTENT	vi
CHA	APTER ONE :	
1.0	INTRODUCTION TO THE PUBLIC COMPLAINTS COMMISSION.	1
1.1	INTRODUCTION.	1
1.2	PURPOSE OF THE STUDY	2
1.3	AIMS AND OBJECTIVES OF THE COMMISSION.	2
1.4	ORGANISATIONAL STRUCTURE OF THE COMMISSION.	3
1.5	FUNCTION OF THE COMMISSION.	4
1.6	DEFINITION AND SCOPE OF INVESTIGATION SECTION IN TERMS OF	
	RECORD KEEPING	5
1.7	TYPES OF CASES OR COMPLAINTS RECEIVED DURING	
	INVESTIGATION AND THE BREAK DOWN OF COMPLAINTS	
	LODGED AGAINST VARIOUS ORGANISATIONS AS AT 1992 - 1993.	11
<u>CH</u>	APTER TWO	
2.0	DATA COLLECTION.	14
2.1	METHOD OF DATA COLLECTION	14
2.2	THE MEANING, FUNCTIONS AND APPLICATION OF COMPUTER	
	TO THE COMMISSION.	17

2.3	THE NEED TO COMPUTERIZE THE COMPLAINTS RECORD	
	AND ITS ATTENDANT PROBLEMS	17
2.4	BENEFITS OF COMPUTERIZATION TO THE COMMISSION.	19
<u>CHA</u>	PTER THREE	
3.0	SYSTEM ANALYSIS AND DESIGN	22
3.1	FEASIBILITY STUDY OF THE EXISTING SYSTEM	22
3.2	REQUIREMENTS OF THE NEW PROPOSED SYSTEM.	23
3.3	DESIGNING OF THE NEW SYSTEM.	23
3.4	ANALYSIS OF PROGRAM MODULES.	24
3.5	DATABASE FILE STRUCTURE	24
3.6	FLOWCHARTS FOR COMPLAINTS REGISTER AND SUMMARY	
	MONTHLY COMPLAINT CHARTS.	
CHA	PTER FOUR	
4.0	PROGRAM IMPLEMENTATION	27
4.1	INTRODUCTION TO PROGRAMMING LANGUAGES.	27
4.2	DATABASE MANAGEMENT SYSTEM	27
4.3	PROGRAM IMPLEMENTATION.	28
<u>CHA</u>	PTER FIVE	
5.0	SUMMARY AND CONCLUSION	29
5.1	SUMMARY	29
5.2	RECOMMENDATIONS	30
5.3	SUGGESTION	34
5.4	CONCLUSION.	35

REFERENCES	36
APPENDIX A	37
APPENDIX B	44
APPENDIX C	51
APPENDIX D	55
APPENDIX E	59

#### CHAPTER ONE

#### 1.0 INTRODUCTION TO THE PUBLIC COMPLAINTS COMMISSION

#### 1.1 INTRODUCTION:-

The public Complaints Commission was established by the Federal Military Government under Decree 31 of 1975 and amended under the act No.21 of 1979.

The idea of the commission was conceived as a result of anomalies inherent in the public service as a result of Nigeria civil war, the then federal military government decided to set-up a panel to look into the national plights with the view to advising her on how to resolve anomalies or to bring the situation under control. The commission met under the chairmanship of chief Jerome Udoji and study the situation and advised the government accordingly.

Among the recommendation by the panel to the federal military Government was to set-up a permanent body that will be charged with the responsibilities of conducting investigations into anomalies arising from mal-administration in public service. And the federal Military Government accepted the recommendation and a body called public complaints commission was established in Nigeria.

The commission was established with headquarters in Abuja and with branches all over the federation including Abuja. At the headquarters, they have the Honourable Chief Commissioner as the head of the commission nation-wide. In the states they have the Honorable commissioner incharge of the affairs of the states offices. At local Government level some area officers were established to cater for the grass-root cases.

However, the commission was also charge with the responsibilities of assisting the aggrieved individual citizens in the country especially individual

citizens who cannot help themselves. Besides, it does not only assist the aggrieved individual citizens but also listening patiently to the expression of anger which without intervention could lead to mental derangement and may also ultimately destroy the individual concern and those around him.

Moreso, the commission is always able to avert the perpetual misery by its being ready to instil the element of trust in the aggrieved person and to assure them being accorded fairness and equity.

#### 1.2 PURPOSE OF THE STUDY.

From the above account, the purpose of the study is;

- 1. To facilitate the efficient and processing of data collected during the course of investigation of activities [data] with the aid of computer.
- 2. To enhance an effective implementation of activities carried-out by the commission with minimum delay .
- 3.To have an accurate record of [investigation] well documented, stored for day to day use and for future use and reference .

#### 1.3 AIMS AND OBJECTIVES OF THE COMMISSION.

The aims and objectives is mainly to resolve administrative disputes and conflicts between individual citizens and those in authority

#### 1. AIMS OF THE COMMISSION.

- [a] To promote justice for the individual citizens without which they can hardly be genuine peace and stability in the country. Therefore, it is the full responsibility of the commission to help those individuals who cannot help themselves to get their right
- [b] To maintain social justice either in public and private organization .

corporation, local government authorities and other public institution and any official of any aforementioned body .

[d] Promote humane, responsive and responsible democratic government as well as ensuring that no Nigerian citizen or anyone resident in the country, has any cause to nurse negative impression of the way government and or its agencies carry out their functions.

#### 2. OBJECTIVES OF THE COMMISSION

[a] The operative word, justice is a focal point of our operation and as it is a concept which conveys fairness and equity. We attempt to approach its realizations with a sense of responsibility, objectivity and disinterectedness. This implies that whether it is the complainant or respondent Who is wronged, justice must be sould to prevail.

[b] We wish to be understood as awesome workers who hunt for information urgently and in order to keep justice from being delayed.

[c] The commission is seen as a veritable ally in their bid to elicit increased output and production, as people are generally known to increase their output in an atmosphere of peace and harmony.

[d] The commission would enhance for the country, a society where no man is oppressed. One should be able to live in peace wherever he/she choose to settle.

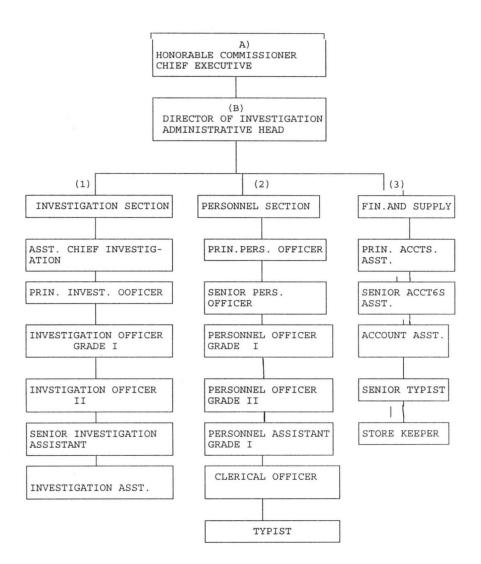
#### 1.4 ORGANISATIONAL STRUCTURE OF PUBLIC COMPLAINTS COMMISSION.

In this place public Complaints Commission maintains three divisions under its organisation, these are as follows:-

- 1. Investigation Section
- 2. Personal Section
- 3. Finance and supply Section.

However, this organisation is headed by the Honuorable Commissioner as the

Chief executive of the Commission. While the head of the entire administration is the director of Investigation who is the administrative head of the Commission, and also who oversee all the activities of the three departments of the organisation. The three units are each headed by the senior officers as indicated in the ognorgram



Fiture 1.4.1. ORGANISATIONAL CHART OF PUBLIC COMPLAINTS COMMISSION ...

#### 1.5 FUNCTIONS OF THE COMMISSION:-

1- To redress grievances, which include hearing from both parties and there must

be principle of natural justice and equity.

- 2- There must be sense of good conscience to ensure that no party was sided (Impartial arbitrar ).
- 3- To maintain law abiding and peaceful co-existence of citizens in the country.
- 4. The Commission is always there to remain in the business of redressing justice.
- 5. Enlightenment Campaign on the purpose of establishing the Commission and its activities in relation to the general populace. Further more, if the investigation department of the Commission would have access to computers it will enable them to collect, store and retrieve more readable complaints in usable form.

The monthly complaints chart is as follows. This is the procedure used during investigation of cases a precorded presently.

However, it is observed that this is not adequate or safe enough during investigation, and documentation, reports are filed and at the end kept in the deep or achive. This process is seen to be unsafe because if the sheets are missing, or file misplaced, it means that all information about that case is lost. This brings us to the need for a more efficient and scientific way of record-keeping which can easily be provided by Computers.

## 1.6 **DEFINITION AND SCOPE OF INVESTIGATION SECTION IN TERMS OF RECORD-KEEPING**.

The literal meaning of investigation according to longman dictionary of contemporary English 'is to examine the reasons for something, the character of someone'.

My discussion with some investigation officer of the commission. They described the term investigation as centered on making enquiries into cases lodged before the commission. It also aim at resolution of cases. It can also be seen asqway of resolving administrative disputes and conflicts between individual citizens and those in authority. Scope of investigation can be look into [3] parts.

- [A] Looking at the activities of investigation .
- [b] Procedures of investigation and complaints lodged .
- [C] Limitation of investigation department.

However, the scope of investigation to public complaints commission investigation department are as follows;

#### [A] THE ACTIVITIES OF INVESTIGATION DEPARTMENT.

- I. Enquiries made into the cases of maladministration in public services .
- II. Improper in motivation based on irrelevant consideration.
- III. Enquiries made into administrative procedures of any court of law of Nigeria .
- IV. Any case appeared contrary to the existing law or regulation.
- V. Mistakes in law or arbitrary in the ascertainment of facts.

#### [B] PROCEDURES OF INVESTIGATION AND COMPLAINTS LODGED.

However, before an investigation is conducted into the cases lodged it will be reduced into writting and signed by the complainant where a complainant is an illiterate, he shall dictate his complaint to someone who is writting it down for him or alternatively he can call at the office of public complaints commission where a staff of the commission assist writting for him .In this case, the writting should be duplicate

signed by the writer as having written it on behalf of the complainant, he [complainant] countersigned as having satisfied it.

This will also be signed by a witness to the complainant after having been written down, it will be passed to the Honourable commissioner who has been empowered to direct investigations into the case. But before the Honourable commissioner directs for the investigation, he makes sure all the necessary documents are attached and submitted.

The commencement of investigation into the complain will start, the complain letter will be filed and given number [registered]. The commission will now forward the complain to the accusing authority for comments and necessary action.

Meanwhile, the receipt of the complain will now be acknowledged. Having done that the case file will be kept in view awaiting response. If no response received within a reasonable period of time a reminder to that letter will be sent and if no response after three remainder letters have being sent at the end an investigation officer will be directed to follow with a view to discuss the matter/case.

. A case recommended for closure is either the case has been successfully resolve or redress or the complainant has lost interest or has decided to withdraw in his own interest .

#### (C) LIMITATIONS OF INVESTIGATION DEPARTMENT.

Moreso, the Investigation department cannot conduct investigation into the following areas.

(a) Any case that is pending before any court of Law in Nigeria.

- (b) Any case that is pending before provisional Ruling Council that is before house Committee into public petitions or
- (c) Any case in respect to any member of the Armed Forces in Nigeria or Police Force Under Nigeria

Army Act of 1960, Navy Act of 1964, the Airforce Act of 1964, as the case maybe.

(d) or any case that is Clearly outside the term of reference of the Commission.

Another vital fact is how records are documented and this are through:-

- By registration of cases In public complaints Commission ("Complaints REGISTER BOOK")
- Keeping of the official diaries for the cases put under B.U. Bring Up and K.I.V (Keep in view).
- 3. By monthly complaints Charts/Operational statistics on annual basis as drawn and explain in chapter two of this project that is (Figure 1.4.3).

Although the register case book is the major place where complains/cases are registered first. This book sample page or sheet can be seen attached #that is the existing way of keeping complaints fig 1.4.2.

SERIAL NUMBER	DATA RECEIVED	FILE AND FOLIO <b>No</b> :	NAMES (S) AND ADDRESS OF COMPLAI- NANTS	NATURE OF COMPLAIN TS	ACTION/ DESCIS- SION TAKEN AND DATA
	4				

FIGURE 1.4.2 Complaints Register Book

MONTH	NO. OF CASES BROUGHT FOR WARD FROM THE PREVIOUS YEAR FROM1991- 95 1991-93-94	NO. OF CASES SATISFACT ORILY DISPOSED FROM 1991- 95 1991-92-93- 94-95	NO. OF CASES PENDING FROM 1991-95 1991-92- 93-94-95	NO. OF CASES RECEIVED DURING THE MONTH FROM 1991- 951991-92- 93-94-95	NO. OF CASES FOUND TO BE OUTSIDE THE COMISSION.S TERM OF REFERENCE FROM 1991- 95 1991-92- 93 1991-92- 93-94-95	NO. OF CASES SATISFACT ORILY DISPOSED OF FROM 1991-95 1991-92- 93-94-95	NO. OF CASES PENDING FROM 1991- 95 1991-92-93- 94-95	TOTAL NO. OF CASES DISPOSE D FROM 1991-92- 93-94-95	TOTAL NO OF CASES PENDING FROM 1991-95 1991-92- 93-94-95
JAN.									
FEB.									
MAR.									
APR.									
MAY						-			
JUNE									
JULY									
AUG.									
SEPT.									
ост.									
NOV.									
DEC.									
TOTAL	4.0. 01.18.48.4								

FIGURE 1.4.3 SUMMARY OF MONTHLY COMPLAINTS CHART

1.7 TYPE OF CASES OR COMPLAINS RECEIVED DURING INVESTIGATION AND THE BREAKDOWN OF COMPLAINTS LODGED AGAINST VARIOUS ORGANISATION AS AT 1992-1993.

The Honourable Commissioner of the Commission is empowered to receive and look into ny complaint. This cases must be purely administrative. The type of case handled are base on nree parts:-

- 1. Federal Ministries and Parastatals
- 2. State Ministries and Parastatals
- 3. Local Government Authorities and Statutory corporations either private or public stitution and of any official of the afore-mentioned bodies.

  ypes of cases lodged against various organisations.
  - (1) Complaints on, corrupt practices and personalities.
  - (2) Complaints on wrongful posting against Federal Ministry of Works and Housing.
  - (3) complaints of under payment of Contract awarded both Federal, State, Local Government and Private Organisation.
  - (4) Complaints on non-payment of wages and personal entitlement.
  - (5) Complaints on non-payment/refund of contribution by the National Provident Fund Management Board.

# THE BREAK DOWN OF COMPLAINTS LODGE AGAINST VARIOUS ORGANIZATION IS AS FOLLOWS: AS AT 1993-1994. NO OF COMPLAINTS

A	FEDERAL MINISTRIES.

a Federal Ministry of Education ----- 1

b	Federal Ministry of Works and housing 4
С	Federal Ministry of Establishment 2
В	FEDERAL PARASTATALS.
а	Nigeria National Petroleum Corporation/Company 1
b	Niger River Basin Development Authority 3
С	National Electric Power authority PLC 2
d	national Library 1
е	Nigeria Army 2
С	STATE MINISTRIES.
a.	Ministry of Education 5
b.	ministry of Agric. and Natural Resources 12.
c.	Ministry of Health 4
d.	Ministry of Finance 1
e.	Ministry of Commerce and Industry 1
D	STATE PARASTATALS.
a.	Niger State Agricultural Development Project 1
b.	Niger State Development Company 3
c.	Niger State Judiciary17
d.	Niger State Water and Sanitation Board 6
e.	Niger State House of Assembly 1

b

#### E LOCAL GOVERNMENT AREAS. Agwara Local Government ----- 1 a. Borgu ----- 2 b. ------ 1 Lapai c. -----1 mariga d. minna Local Government ----- 2 Paikoro Local Government ----- 1 f. Suleja Local Government ----- 3 g. Wushishi Local Government ----- 1 **ETC** F PRIVATE COMPANIES. Bi-Water (Nig) Limited ----- 1 Julius Berger Nig Limited ----- 1 2. 3. M.K.I. Enterprises (Nig) Limited ----- 2 Imani and Sons (Nig) Limited ----- 1 4. Pahavon (Nig) Limited -----1 5. Good Enough Restaurant ----- 1 6. Balami (Nig) Limited ----- 1 7.

#### **CHAPTER TWO**

#### DATA COLLECTION

#### .1 METHOD OF DATA COLLECTION

2.0

The method used for gathering data and materials for this project include:-

- . Official report, pamphlets, publication. an attempt was made to examine some of the fficial documents like Decree establishing the Commission, information books, Manual, nnual reports etc.
- . Available Literature dealing with similar research topics of computers.
- Personal interview with some of the personnel who have aknowledge on the subject or milar topic based on investigation and computer in Federal University of technology minna.. Information discussion carried at collecting relevant data was conducted at different levels. enerally, questions were the free response type and were channelled to get factual facts of a Commission.
- Personal Observation entails some data include in this research project are available from researcher's period. This enable me to prosper on the progress of my project historical m of records based on investigation department.

Library relevant materials, books, journals based on computer are being used.

#### THE MEANING OF COMPUTER ITS FUNCTIONS AND APPLICATIONS.

The growing present of computer only broaden our reach in the same physical sense t electronic communications do, but also makes the power of infinite intelligence available.

question is will the computer change the society more radically than other modern nologies have? These are strong indications that it will, for example if development in

computer and communication enable people to work and learn at home erecting office buildings and schools would not be necessary.

It must however be said that many people have raised questions concerning it's value to ociety. Computers are not meant to usurp human roles, but to aid individuals works. Although omputers can be used for complex human tasks, they should not be used to replace human address. People must remain responsible for their action and maintain control over the omputer. Essentially a computer performs three basic functions.

- It receive data (INPUT):
- It process data by various computation (processing).
- It emits data (OUTPUT)

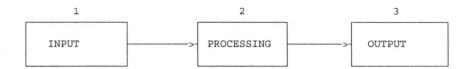


FIGURE 2.21 THE THREE BASIC FUNCTIONS OF A COMPUTER

From the above discussion computer can be defined as an "an electronic device which epts and process data by following a set of instructions (programs) to produce an accurate efficient result (Information with height degree of speed).

Since the ultimate aim of a computer is to produce information, the art of computer is often rred to as information processing. The value of computer lie solely on its high speed (due to lectronic nature) ability to store large amount of data, the unfairing accuracy and precision

and these accounts for its supremacy over manual computation. Therefore, the computer was thought and developed to reduce the complex calculation into smaller forms and to help in making an easier accurate and reliable logical comparison between things. The computer help to ease the cumbersome of inflow and outflow of data and information respectively and to further help in efficiently during filling and processing of data.

The application of computer in a relatively short time of its invention, has affected many areas of our lives. For example some of the applications are:-

#### A. GENERAL IMPACT.

It make possible very sophisticated medical diagnostic tools, but most importantly, computer have had a tremendous impact on the way information is processed within organisation.

#### B. SPEED.

The speed with which computers can process large quantities of information has led to the generation of new information on a vastscale.

#### C. ACCURACY.

Computer accuracy is very high.

#### D ERRORS DETECTING.

Errors in machinery can occur, but due to increase efficiency in errors detecting techniques, these errors seldom lead to false results.

#### E. COMPUTERISING MANUAL SYSTEM.

The use of computer in our organisation today has concentrated on computerising manual system. Thus, the standard data processing system such as payroll processing, staff record, complaint records of certain facts are done with the aid of computer, where appropriate so as

to reduce the clerical burden.

Although, as earlier discuss above the public Complaints

Commission maintains three Section which are as follows:-

- 1. The Investigation Section.
- 2. The Personnel Section
- 3. The finance and Supply Section.

Since the Commission is primarily set up to make enquiries of the cases of mal-administration and other related issues ready before her, Therefore Investigation - Section of the Commission is the lifewire of the entire Commission. Other sections, that is the personal and Finance and supply as mentioned in other Chapter are merely supportive of the investigation department of which is the main place to be computerized since it deals with cases lodged to it by members of the public, computer can be appllied to it.

## 2.3 THE NEEDS TO COMPUTERIZE THE COMPLAINT RECORDS AND ITS ATTEDANTS PROBLEM

Each complaint is registered, given a file and numbered. It is in this file that any relevant document to this complaint is put. These documents are said to be confidential and secret. They therefore deserve to be kept under lock and key to preserve its secrecy. But this measure does not give these documents adequate safety as the files can be stolen from the public Complaints Commission Office. Hence the idea of computerizing all the data or information on each and every complaint lodged to the commission.

(1) With this method put in place surely the cases will have highest level of secrecy maintained.

The division to be computerized is the investigation Unit of the Commission as it deals with this

aspect OF complaints.

- (2) It will also preserve whatever kind of information will be needed for future reference on a particular case.
- (3) The provision of computer will have beaten the cost of production of files. This will allay the fears of files being stolen or destroyed.
- (4) With this computer to be installed it add more records when the need arises.
- (5) Large volume of data is easily maintained.
- (6) Data can be sorted out whenever the need arises.
- (7) Summarising of data can take place.
- (8) Reporting of data at anytime.

The attendant problems are as follows which the Commission has couple with the problem to purchase a personal computer:-

- (a) Papers occupied too much space which can be used in another thing.
- (b) Cost of paper that are in used is much.
- (c) Storage method of such papers is faulty.
- (d) Retrieval of such information sometime becomes increasingly difficult.
- (e) Possibility of errors and mistakes during the process of work.
- (f) Non-confidentiality of certain information.
- (g) Mishandling of input documents from the investigation department.
- (h) The cost of purchasing one for each branch office in Nigeria.
- (i) It's maintenance.

- (j) It will require a specially trained personnel to handle it.
- (k) Affect manpower that is Staff strength will fall and capital cost.
- (I) Lack of fund.

These problems hinders the progress, effective and efficient working procedures under the investigation section.

#### 2.4 BENEFITS OF COMPUTERIZATION TO THE COMMISSION

The benefits of computerization include the followings:-

(1) SPEED:- The most obvious benefit of using a computer is

speed. The computer can perform calculation and data processing more quickly than alternative methods can work that might take hundred months or even year to complete manually may be accomplished in ho urs or at most a day by computer. For example, some computer can be hundred of thousand or even millions of arithmetic operations per seconds.

- (2) ACCURACY:- If the computer is properly programmed and provided with accurate data, it will do intended work with a very high degree of accuracy. The computer does exactly very high degree of accuracy. The computer does exactly what the programmer tells it to do .In addition, the computer does not get fatigue, thus avoiding the errors might well make under the same circumstances .
- 3. RELIABILITY; The computer can work almost twenty-four hours a day [with a little-time out for equipment check-out and maintainance] .
- 4. RETENTION; The computer can store and search massive Files of data and programs. The contents of the files does not fade or lost, and it can be used time and again. This storage can take place in the hard-disk if properly maintained.

- 5. ECONOMY; Usually, the per unit cost of processing data or doing computation by computers is considerably lower than by alternative means[i.e manual or mechanical methods].
- 6. WIDE APPLICABILITY; A computer can be used to solve a wide variety of problems that arise in science and business . The boundaries of what the computer can accomplish are limited only by the ability and imagination of its users .
- 7. SECURITY; With computer it will provide security for such data.
- 8. RETRIEVAL OF DATA; To be able to retrieve data when the need arises .
- 9. CORRECTNESS; To obtain correct information .

The chart above shows the program execution of the new proposed system. This type of structure also enable each file to be maintained by a set to be sub-routines like:-

- a. <u>PASS WORD:</u> Serves as the key to the Program, PASS WORD "ABG" which is been activated by typing. This gives such information as the project tittle, name and registration number of the author.
- b. MAIN MENU:- Where program is selected for execution.
- c. ADD PROGRAM:- This will enable a new record to be added into each file.
- d. MODIFY PROGAM:- This enables to change a record, if the need arises.
- e. <u>DELETE PROGRAM:-</u> Where a record is **not** required in the database, the delete program is used to remove it. It is mainly to remove record.
- f. <u>PRINT PROGRAM:</u> To enable printing of output that is the end result of the program.

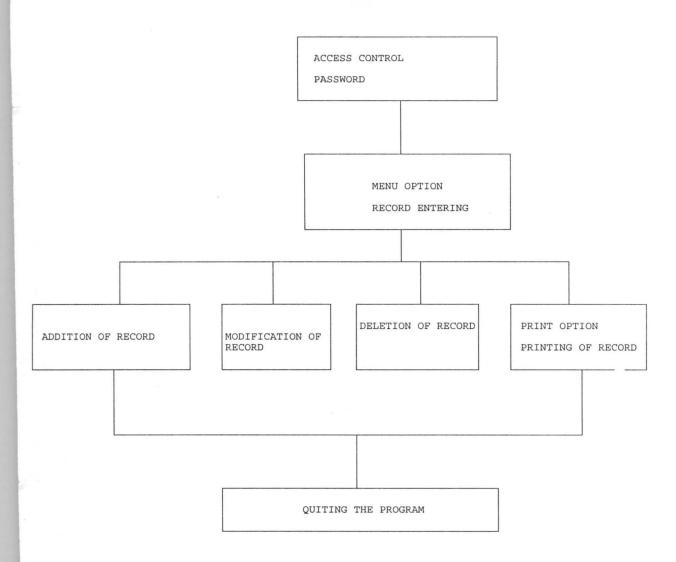


FIGURE 3.3.1 PROGRAM STRUCTURE OF THE NEW SYSTEM

#### CHAPTER THREE

#### 3.0 SYSTEM ANALYSIS AND DESIGN

#### 3.1 FEASIBILITY STUDY OF THE EXISTING SYSTEM

The existing system used in the commission is the manual system of operation, and this entails a lot of paper, apart from being cumbersome and time consuming, it also causes dissatisfaction between the complainants whose case are left unresolved. Basically, registered books, diary and complaint chart is mainly used in recording information about each complainant in Niger state public complaints commission, but register book is first place where complaints are entered before other data are extracted for further action .

In carrying-out this study, interviews were conducted with a number of officials of the commission especially some key officials in-charge of investigation division. This include the assistant chief investigation officers, the principal investigation officer, senior investigation officer. Though the investigation officer is the officer in-charge of carrying out investigation of complaints logged.

In addition, samples of the annual report prepared base on records in the last three years were exxamined. However it was discovered that almost all the information required about a particular record case were manned by the investigation unit under investigation officer. But most times, these records cannot be obtained easily because it is difficult to trace them out in some cases or it can take clerk some couples of hours to get out these record. The records are either misplaced or missing. At the beginning of each case, a case file is opened for the complainant after the necessary documents have been brought to the investigation department of the comission. This file is circulated to the officials involved in the department and at each stage

of the case, the investigation department takes note of the progress of the case. This is done on the registered book, diaries etc. This contininues till the end of the case when the file will be closed as can be directed by the Hounourable commissioner. Though the primary motive ofgovernment is for the commission to redressed/resolve public Complaints but with recent development, this complaints can be kept and maintained with the use of computer.

#### 3.2 REQUIREMENT OF THE NEW PROPOSED SYSTEM

The new proposed system of complaints procedures. Using the computer is designed to acheive the following objectives and suggestion:-

- a. It will be possible to generate reports on the screen or hard copies can be produced through the printer and back-up copies in the diskette.
- b. The reports and the case records can be generated in the following ways:
  - i. The period of the case or date.
  - ii. By case registration number or folio.
  - iii. By the serial number of that case.
- c. Routines such as addition, deletion and modification of records are corporated into the system to maintain the integrity of there database file.
- d. Large volume of data can easily be handled with the new system due to the capability of the computer in classification, retrieval, sorting and storage of data and they can easily trace require information directly.

#### 3.3 DESIGNING OF THE SYSTEM

The processing specification is a description of the captioning of information into the database file maintained by the system, the following system flowchart pictorially reperesent

the processing specification of the design.

#### 3.4 ANALYSIS OF PROGRAM MODULES

After the display of the open screen (which is been activated by typing the pass word ("ABG") which gives such information as the project tittle, name and registration number of the author. The program automatically takes the user to the main Menu which has five options of selections.

The user has the option of choosing any of the five options presented that is;

- i EXIT to DOS :- Disk operating system
- ii ADD RECORDS: This enable the user to add more record, if the need arises
- iii MODIFY RECORDS:- The user can as well modify record if the need to modify records arises.
- vi DELETE RECORDS:- Records can be remove as well.
- v PRINT RECORDS. :- Records can be printed out as output .

Without necessarily having to go through them sequentially.

After running this operation successfully, the user will be taken back to main menu options through which the user can quick the program.

The Commission can use this program to enable it add more complaints of cases brought before it, Complaints can as well be modify if the needs arises, Complaints can also be deleted when not needed. The end result of printing out the Complaint as output can be achieved after due processed.

#### 3.5 DATABASE FILE STRUCTURE

In this project databases file structure includes the following items in the database

structure of the commision.

These are, the Database file for Complaint Register book, and summary of monthly complaint chart which invariably that of complaint register book contains Serial Number, data received file and folio number, name of complainants and nature of Complaint.

Secondly, the data base file for monthly Complaint Chart which also denotes the month, Number of cases brought forward, number of cases satisfactorily disposed, number of cases pending, Number of Cases received during the month, Number of cases Found to be outside the reference. Total Number of cases disposed off.

#### a. <u>INPUT SPECIFICATION</u>:- Here a database file will be used.

The database file is (Cmp1.DBF) complaint register, (cmp2.DBF) For monthly complaint Chart.

This would record the particular complain of all the cases. The database file of complaint register contains (8) fields and that of monthly complaint Chart is (10) Fields.

The structure is shownbelow:-

NUMBER	FIELD NAME	FIELD TYPE	WIDTH	DFC	INDEX
1	SER-NUM	NUMBIC	8		N
				-	
2	DAT-RECD	DATE	8	-	N
3	F -F- NUM	NURFNC	45	-	N
4	NAM-OF-COM	CHARACTER	45	-	N
5	NAT-OF-COM	CHARACTER	45	-	N
6	DIC-OFF-INC	CHARACTER	45	-	N
7 .	PG-M-O-CAS	CHARACTER	45	-	N
8	HN-CM-COMT	CHARATER	45	-	N

FIGURE 3.5.2 Database file for complaint regisster (CMP1.DBF)

NUMBER	FIELD NAME	FIELD TYPE	WIDTH	DFC	INDEX
1	MNTH:	CHARATER	10	-	N
2	NUM-C-B-FR	NUMBER	10	-	N
3	NUM-C-S-DP	NUMERIC	10	-	N
4	NUM-C-PD-C	NUMERIC	10	-	N
5	NUM-C-REC	NUMERIC		-	N
6	NUM-C-F-OUT	NUMERIC	10	-	N
7	NUM-C-S-DP	NUMERIC	10	-	N
8	NUM-C-PDIV	NUMERIC	10	-	N
9	TOT-N-C-TR	NUMERIC	10	-	N
10	GD-T-C-PIV	NUMERIC	10	-	N
	TOTAL		100		

FIGURE 3.5.3 Database file for Monthly complaint chart. (CMP2.DBF)

#### CHAPTER FOUR

#### 4.0 PROGRAM IMPLEMENTATION

#### 4.1 INTRODUCTION TO PROGRAMMING LANGUAGES

For the purpose of computerising the Commission's complaints record system system in Public Complaints Commission for which the project is being undertaken the "database management system" approach is recommended.

The dBASE is a mechanical, centrally controlled collection of data and information in an organisation. The data are physically organised and stored so as to promote shareability, evaluability and data integrity. This is made operational by a database management system DBMS.

Data base management system controls the access to the data base because it is a software which can perform the function of defining, creating, revising data.

Data base Management System is chosen for this work because of the following reasons:-

- (a) It reduces data duplication.
- (b) It increases the speed of implementation.
- (c) Data integrity and security can easily be secured.
- (d) Data Structures can be change without changing theprograms which uses the data.

#### 4.2 DATABASE MANAGEMENT SYSTEM

The introduction of dBASE management system is adopted by this project because it provides for the storage and retrieval of data and subsequent generation or production of information. It also enable the use of computer program. And dBASE IV, vernsion 4.0 is being used for this project work.

#### 4.3 PROGRAM IMPLEMENTATION

In an organisation like the Niger State public Complaints Commission for which the project is a case study, it is important to implement this program. The process of implementation can be divided into stages:- These are Training, Conversion, Program implementation review.

- **4.31 TRAINING**:- This involves the training of staff who are to operate the computer. The training will be broad enough to cover the use of the hardware and software that accompany the system and instruction on how to use the equipment to detect malfunction in the system and what steps to take when such occur.
- **4.3.2** <u>CONVERSION</u>:- It is suggested that the conversion to the new system be made side by side with its existing manual system. The advantages of this parallel system of conversion is that, should the new system fail no data or information will be lost.

Secondly, outputs from both the old and new system can easily be compared by the user. It is advised that the staff operating the existing system be trained on the new system, this will give room for efficient comparison to be made and it will be less costly.

4.3.3 **POST IMPLEMENTATION REVIEW:** After the conversion process is completed. It is necessary to review the new system. This will enable the user determined whether the new system has met the requirement expectation for which it is developed. It improvements are required, a system maintenance is to be introduced. System maintainance is used to detect and correct and meet information needs of the organisation.

## CHAPTER FIVE

### 5.0 SUMMARY AND CONCLUSION

### 5.1 SUMMARY

One of the main functions of the public Complaints is to redress grievance that is to look into complaints of the aggrieved citizens who had believed to have suffered injustice due to bureaucratic mistake, abuse of office and incompetence of those in authority as well as hearing from both parties in which the principle of natural justice and equity must take it course. However, this responsibility is undertaken by investigation department under public Complaints Commission, unbehalf of the Federal Government be it directly under the branch office of the State Government.

Investigation department is the life-wire of the Commission of which it's responsibility is shouldered. It is imperative therefore, for the proper and accurate complaints to be processed and documented. This various complaints are entered by the State, Local government as well as private corporation and individuals etc. For peaceful co-existence of future.

A situation where no proper records are available (of complaints) there is bound to be lapses when it comes to preparation of yearly annual report, planning of future or when some vital information is required about any particular complaint at anytime. In an organisation, such as public Complaint Commission, that handles large volume of complaints, the manual system as operated now cannot be an efficient system of processing and documenting complaints. Moreso, it cannot cope with future challenges if at all. This view, necessitated the need for an efficient and logical system of complaints documentation with the use of computers or which the computer can easily offer. Thus, the proposal to computerised the complaints Commission's

record system of investigation unit in terms of complaints matters is inevitable.

### 5.2 **RECOMMENDATIONS**

For careful, efficient and effective implementation of the system of computer in complaints brought to redress, in term of processing and documentation, it is advisable to think of the cost benefit analysis of the new system.

However, for a meaningful computerization of any organisation, the following recommendations are also made:-

- 1. Data pertaining to the problem must be gathered, organised and interpreted.
- 2. The present procedure should be reviewed to determine what improvements are possible. The procedures should be redesigned to meet current meeds. New system designs should consider the current scope of the problem the form and type of input data to be used, the type of output required.
- 3. The coded program must be checked for errors and tested prior to being used on a routine basis to ensure that the correct problem is being solved and that correct results are being produced.
- 4. Conversion of the new approach must be made the program must be properly stored when not in use. It must be described in writing and it must be revised and maintained as needs change.

### 5.2.1 CAPITAL COST

Type of personal computer and its facilities recommended for public Complaints Commission.

### 1. PENTIUM 150 MHZ

### 2.2 Giga byte Hard-disk

Super V.G.A. Adopter Card 3.5 disk drive

12 speed CD ROM = № 150,000.00

### 2. i. DOT MATRIX EPSON PRINTER

 $LQ 2170 = \aleph 70,000.00$ 

ii. LASER 6L = N = 50,000.00

1 KVA APC UPS (CONVERTER) = №30,000.00

4. 1 KVA STABILIZER =  $\aleph$ 8,000.00

7. ANTI STATIC DUST COVER = №500.00

8. DISKETTE TRAYS =  $\mathbb{N}1,500.00$ 

9. FULLY AIRCONDITIONED = №55000.00

10. TABLE AND CHAIR = № 10000.00

However, this will enhance full execution of programs with all comfortabe facilities mentioned above. And to install the computer the following factors must be considered.

- a. Cost of installation № 20,000.00
- b. System analysis/software development №60,000.00
- c. maintenance cost per-annum (approximately) № 60,000.00
- d. Running cost per-annum (approximately) № 15,000.00
- e. Cost of training 2 No. staff and salaries for a year №40,000.00
- f. Add contigencies 5%

After the first year, the cost will totally reduce, because only the maintenance, running cost and the salaries of staff will be increase, as such the system will be able to pay back the

initial investment in the next three or four years, if the benefits derived from the new system is considered.

### 5.2.2 COST BENEFIT ANALYSIS OF THE NEW SYSTEM

The overall cost of computerization of complaints in Public Complaints Commission can be divided into four parts these are:-

- A. Installation or Capital Cost
- B. Personnel Training Cost
- C. Maintenance Cost.
- D. Running Cost.

### (a) INSTALLATION OR CAPITAL COST

These include the cost of purchasing a personal computer including all necessary hardware like the printer, stabilizer, storage facilities, table and chair. The system analysis, design and software development and cost of installation of the system.

### (b) MAINTENANCE COST

The maintenance cost will mostly be on repair and servicing of the system which is necessary and also maintenance of the necessary software to meet the ever-increasing challenges of complaints.

### (c) RUNNING COST

The running-cost is basically on the purchase of back-up copies like diskettes, stationery, ribbon for printer etc. Which are necessary for efficient performance. This also include light bills.

### (d) PERSONNEL COST

This include the cost of training personnel to handle the computers and their monthly renumeration or salaries.

The computerisation of the public Complaints Commission is of immense benefit to the government because it will enhance better performance and ensure the safe-keeping of complaints records for future reference.

The total estimated cost of computer arising from the processing of complaints and document of records under investigation can be calculated as follows:-

It is also recommended that more than one terminal to installed in order to make the system completely on-line.

As earlier discussed, the implementation of this new system can be operated (Parallel) or side by side with the existing manual system for at least one year as this will enable the operating staff to actually see the lapses of the manual system as against the efficiency of the proposed computerised system.

Some software applications which might prove useful in this regard include the following:-

- (A) Word processing software
- (B) Spreadsheet
- (C) Database

# A) WORD-PROCESSING SOFTWARE.

Many word-processing packages are available in the market today. This include Wordstar, Wordperfect, Microsoft etc. Routine activities of investigation section on cases such as writting of cases and the likes can be easily and better handled by a word-processing rather than traditional typewriter. As a first step in Computerising the investigation units, a computer and

suitable word-processing packages should be acquired.

### B) SPREADSHEET SOFTWARE

Also, most activities of the investigations of cases entails some calculations such as the statistical parts of number of cases etc. The activities could easily be arrived at by the use of spreadsheet software. Available software that can be used for this include the lotus -1-2-3 for the complaints yearly prepared chart (HISTOGRAPH).

### C) DATABASE SOFTWARE.

Information obtained from some sort of database is vital to most activities of investigation.

Software such as the Database 5 could be found useful in creating large data basis with relative ease. Though dBASE IV is used for this project work.

### 5.3 **SUGGESTIONS**

The only suggestion for the efficient, effective, execution of these services in terms of data handling (complaints) more columns should be created in the complaints register book, , such as;

- 1. Column for Honourable Commissioner's comment with date and signature.
- 2. Column for desk officer incharge of the complaint brought before the commission.
- 3. Column for progress made so far on the complaints to know the exact place and how far the case had gone.

These will enable the Commission attain some more vital fact base on the complaints which can be known at anytime, if needed either by the (Complainant or respondents). It will give any complainant, visitor and officers of the Commission at a glance the position of the Commission's activities without much difficulties.

4. <u>FUNDING</u>: My observation here is that the Commission is under funded and thiis had affected the Commission activities. If the funding situation of the Commission is improved by the Federal Government the Commission will be able to perform it's activities more effectively.

Transportation problem too hinders officer to follow cases couple with lack of enough working materials.

### 5.4 **CONCLUSION**

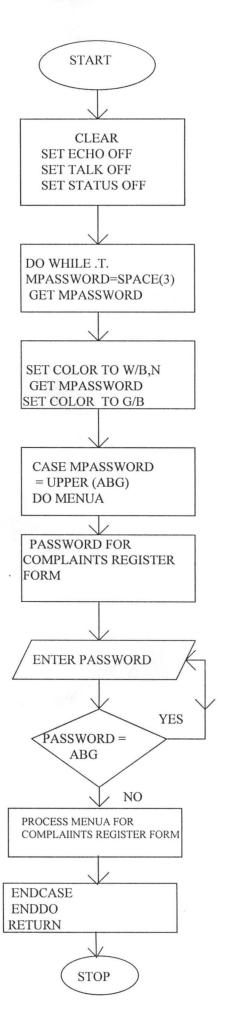
With access to powerful hardware and software technology, the potential impact of computer system on an organisation is tremendous. This project work is an attempt to solve the problem associated with the manual system of (processing and documenting complaints) as noticed in the earlier chapters of this project work. if properly used computer offers a vast potential in providing basic conveniences, freedom from clerical drudgery and careful procedures of analysis, processing, documenting and keeping of all various forms of complaints. The implemention of the software problem identified with manual system currently being operated will be drastically reduced or eliminated completely.

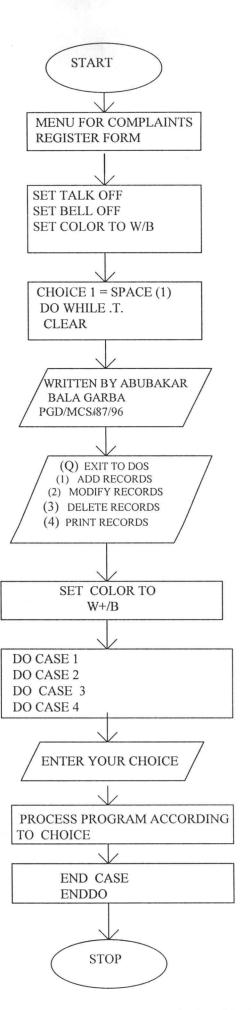
# **REFERENCES**

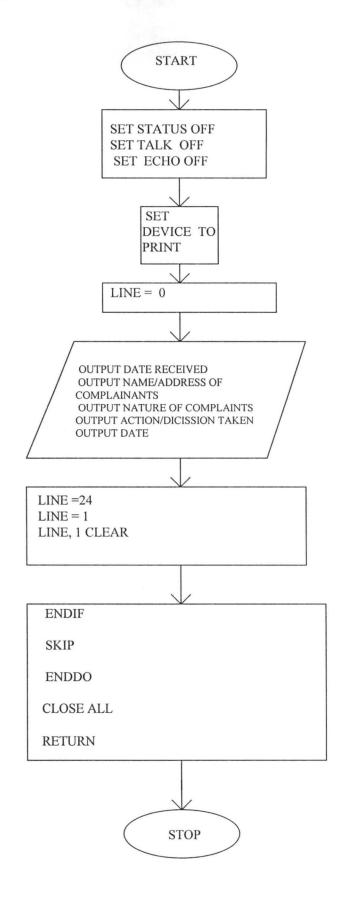
1.	Ayo C. K.	(1994)	Computer Literacy Operations and
			Appreciations 'Walanukitan Commercial Press
			Nigeria.
2.	Akim Alam F. H .A	(1995)	Understanding and Using Computer. Abacus
			Press Lagos.
3.	Badamosi R.O	(1997)	System Analysis and Designed (Unpublished).
4.	Clare P. C	(1983)	Data Processing Academy Press Lagos
5.	Fuort W. M.	(1989)	Introduction to Computer the Tool for Business.
			Richard D. lawin Incorporated (U.S.A.).
6.	Hornby S.A	(1974)	Oxford Advanced Learner Dictionary of Current
			English Oxford Press.
7.	Kola R.	(1997)	Database Management System Managing
			Databases, using Dbase IV (Unpublished).
8.	Maynand J. M.	(1980)	Computer Programming Made Easy. W. H.
			Allen London.
9.	Rev. Canon H. O.	(1982)	Manual of Public Complaints Commission
			Published at Obudu Cross River State Nigeria.
10.	Tanko M. A.	(1994)	Annual Report Federal Public Complaints
			Commission Minna, Niger State.
11.		(1975)	Public Complaints Commission General
			Information book (Published by Federal Public
			Complaints Commission) Kaduna Nigeria

# APPENDIX A

(ALGORITHM AND FLOWCHART FOR COMPLAINT REGISTER FORM)







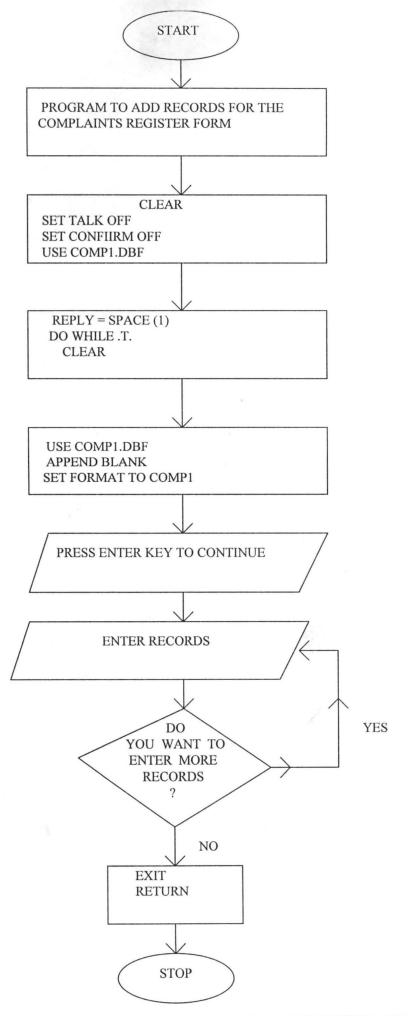
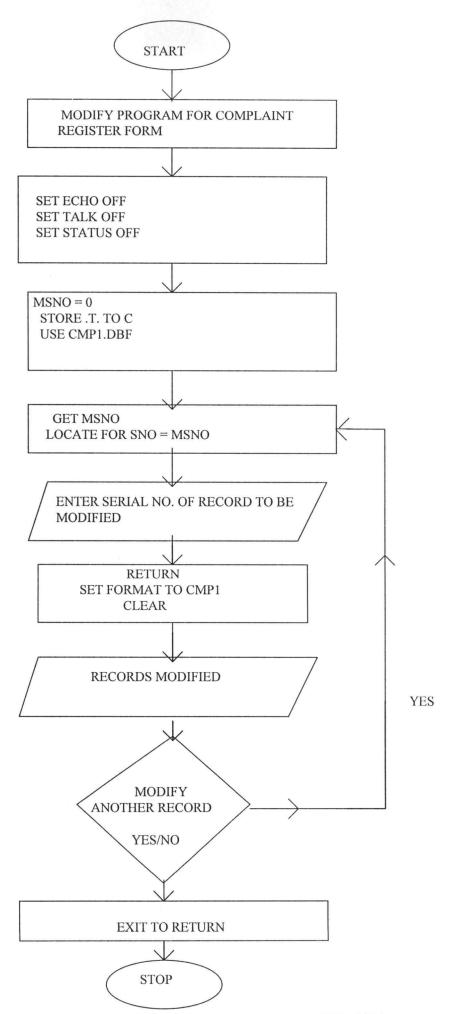
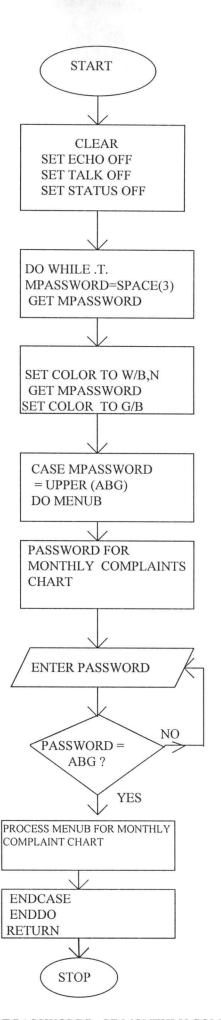


FIGURE 3.6.4 FLOWCHART TO ADD RECORDS OF COMPLAINT REGISTER FORM



# APPENDIX B

(ALGORITHM AND FLOWCHART FOR MONTHLY COMPLAINT CHART)



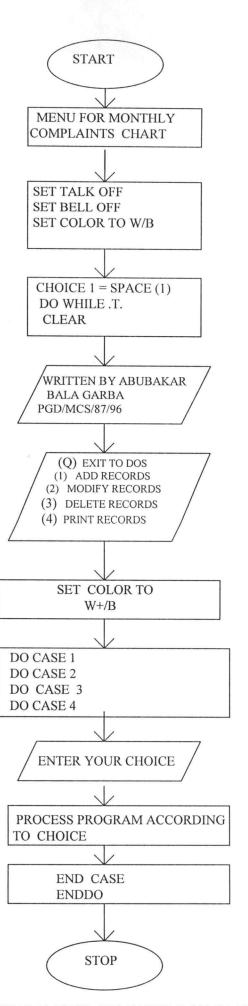


FIGURE 3.6.8 FLOWCHART MENUB OF MONTHLY COMPLAINT CHART

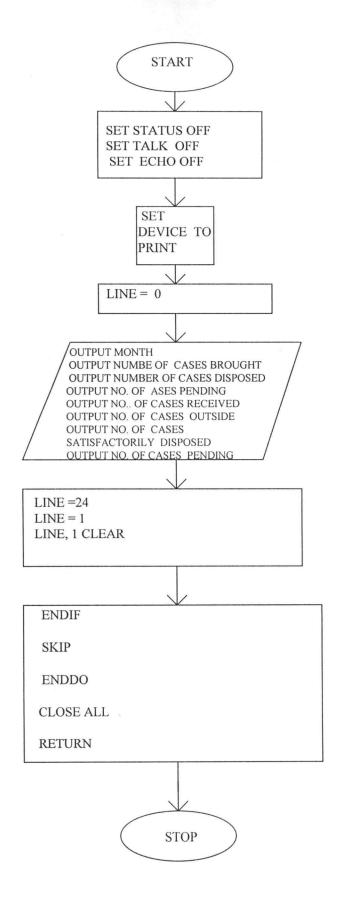


FIGURE 3.6.9 FLOWCHART OF MONTHLY COMPLAINT CHART

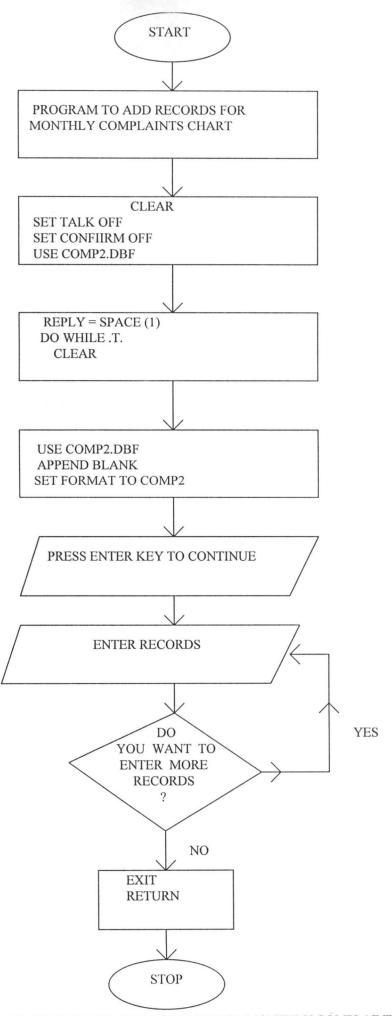
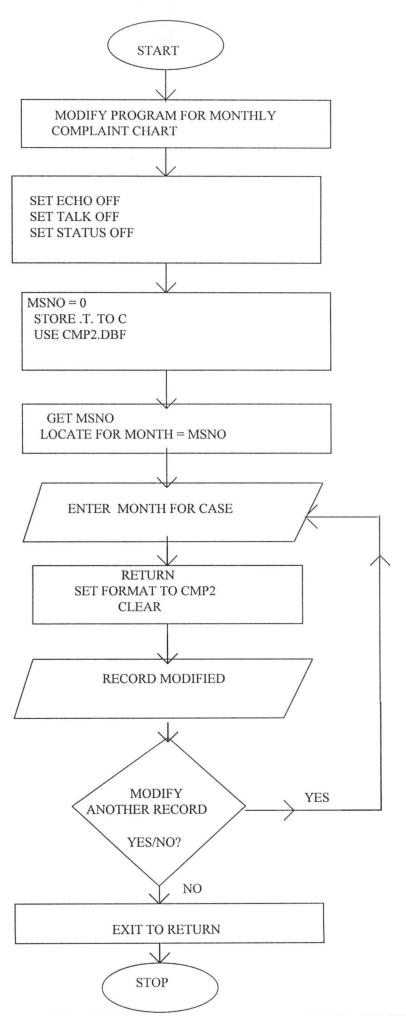


FIGURE 3.6.10 FLOWCHART TO ADD RECORDS FOR MONTHLY COMPLAINT CHART



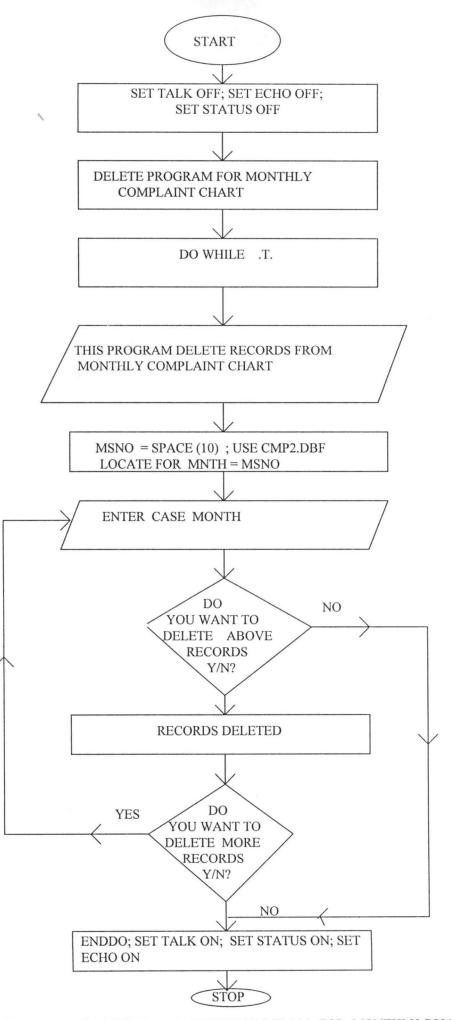
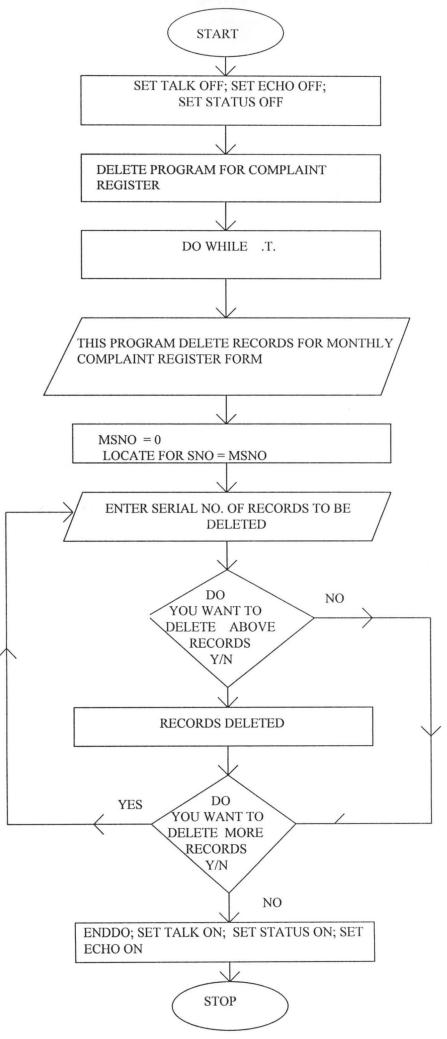


FIGURE 3.6.12 FLOW CHART DELETE PROGRAM FOR MONTHLY COMPLAIN CHART



# APPENDIX C

(SAMPLE PROGRAM OUTPUT FOR COMPLAINT REGISTER FORM)

# PUBLIC COMPLAINTS COMMISSION COMPLAINTS REGISTER FORM

OP:	ENING MENU
[0]	EXIT TO DOS
[1]	ADD RECORD
[2]	MODIFY RECORD
[3]	DELETE RECORD
[4]	PINT RECORD

ENTER YOUR CHOICE

COMPLAINT REGISTER FORM

ADD RECORDS

FILE AND FOLIO NUMBER 3146

DATE RECEIVED 19/06/92

NAME AND ADDRESS OF COMPLAINANTS MALL. A.M.B C/O ALH. A.B REV. OFF. MX

NATURE OF COMPLAINTS COMPLAINTS AGAINST A TOWN PLANNING OFFICE

ACTION/DECISSION AND DATE CLOSED 28-1-92

DO YOU WANT TO ADD MORE RECORDS (Y/N) ?

### COMPLAINT REGISTER FORM

#### MODIFY RECORDS

FILE AND FOLIO NUMBER 3146

DATE RECEIVED 19/06/92

NAME AND ADDRESS OF COMPLAINANTS MALL. A.M.B C/O ALH. A.B REV. OFF. MX

NATURE OF COMPLAINTS COMPLAINTS AGAINST A TOWN PLANNING OFFICE

ACTION/DECISSION AND DATE CLOSED 28-1-92

DO YOU WANT TO MODIFYE MORE RECORDS (Y/N) ?

COMPLAINT REGISTER FORM

DELETE RECORDS

FILE AND FOLIO NUMBER 3146

DATE RECEIVED 19/06/92

NAME AND ADDRESS OF COMPLAINANTS MALL. A.M.B C/O ALH. A.B REV. OFF. MX

NATURE OF COMPLAINTS COMPLAINTS AGAINST A TOWN PLANNING OFFICE

ACTION/DECISSION AND DATE CLOSED 28-1-92

DO YOU WANT TO DELETE ABOVE RECORDS (Y/N) ?

#### PRINT PROGRAM FOR COMPLAINT REGISTER FORM

S-NO	DATE	F-NO	NAME/ADDRESS OF COMPLAINANTS	NATURE OF COMPLAINTS	ACTION/DECISSION
	RECEIVED				TAKEN AND DATE
1	19/06/92	3146		COMPLAINTS AGAINST A TOWN PLANNING OFFICE	CLOSED 28-1-92
2 :	19/07/92	3147	ALH. A.M.B.N.W.1 AIRPORT RD. LIMAWAMX	COMPLAIN ON APPEAL FOR ASSISTANCE	CLOSED 02-08-92
3 :	24/09/92	3148	MALL. A. H. A. F.M.W.H MINNA	COMPLAINT ON WRONGFUL POSIYION	CLOED 20-03-92
4	08/06/92	3143	MALL.G.A C/O H.B.K PUBLIC.COMPL.COMM MX	ONON PAYMENT OF NATIONAL PROVIDENT FUND CONTR.	CLOSED 20-03-92

# APPENDIX D

(SAMPLE PROGRAM OUTPUT FOR MONHTLY COMPLAINT CHART)

# PUBLIC COMPLAINTS COMMISSION MONTHLY COMPLAINT CHART

	OPENING	MENU
[0]	EXIT	TO DOS
[1]	ADD	RECORD
[2]	MODIE	FY RECORD
[3]	DELET	TE RECORD
[4]	PINT	RECORD

ENTER YOUR CHOICE

### MONTHLY COMPLAINT CHART

### ADD RECORDS

MONTH		JANUA	ARY	
NUMBER	OF	CASES	BROUGHT FORWARD 207	
NUMBER	OF	CASES	SATISFACTORILY DISPOSED 11	
NUMBER	OF	CASES	PENDING 196	
NUMBER	OF	CASES	RECEIVED DURING THE MONTH 0	
NUMBER	OF	CASES	FOUND TO BE OUTSIDE THE REFERENCE	0
NUMBER	OF	CASES	PENDING 11	
NUMBER	OF	CASES	DISPOSED OFF 11	
TOTAL N	IMUV	BER OF	CASES PENDING 207	

#### MONTHLY COMPLAINT CHART

### MODIFY RECORDS

MONTH JANUARY

NUMBER OF CASES BROUGHT FORWARD 207

NUMBER OF CASES SATISFACTORILY DISPOSED 11

NUMBER OF CASES PENDING 196

NUMBER OF CASES RECEIVED DURING THE MONTH 0

NUMBER OF CASES FOUND TO BE OUTSIDE THE REFERENCE 0

NUMBER OF CASES DISPOSED OFF 11

TOTAL NUMBER OF CASES PENDING 207

DO YOU WANT TO MODIFY MORE RECORDS (Y/N) ?

#### MONTHLY COMPLAINT CHART

### DELETE RECORDS

MONTH JANUARY

NUMBER OF CASES BROUGHT FORWARD 207

NUMBER OF CASES SATISFACTORILY DISPOSED 11

NUMBER OF CASES PENDING 196

NUMBER OF CASES RECEIVED DURING THE MONTH 0

NUMBER OF CASES FOUND TO BE OUTSIDE THE REFERENCE 0

NUMBER OF CASES PENDING 11

NUMBER OF CASES DISPOSED OFF 11

TOTAL NUMBER OF CASES PENDING 207

DO YOU WANT TO DELETE ABOVE RECORDS (Y/N) ?

IST AND PRINT PROGRAM FOR MONTHLY COMPLAINT CHART

ONTH	NO. OF CASES BRGTH.	NO. OF CASES DISPOS.	NO. OF CASE RECEIVED	NO. OF CASE OUTSIDE	NO. OF CASE SATIS.	NO. OF CASE PEND.	TOTAL NO. OF CASES	TOTAL NO. OF CASES
					DISP.		DISP.	PEND.
JANUARY	207	11	196	11	0	0	11	207
FEBUARY	196	10	186	10	0	0	10	196
<b>1ARCH</b>	186	13	173	14	7	1	12	172
APRIL	173	9	164	89	1	0	8	171
YAN	164	5	154	9	0	162	10	172
JUNE	159	6	159	12	0	0	12	171
JULY	153	9	144	14	0	0	14	158
AUGUST	144	0	144	7	0	0	4	149
SEPTEMBER	144	6	138	11	0	0	9	141
OCTOBER	138	9	131	7	0	0	7	251
NOVEMBER	134	9	134	14	12	7	3	38
DECEMBER	131	9	122	12	0	12	134	0

# APPENDIX E

### (PROGRAM CODE FOR COMPLAINT REGISTER FORM)

SET CONFIRM OFF SET TALK OFF SET STATUS OFF SET BELL OFF SET ESCA OFF RESP = SPACE(3)DO WHILE .T. @12,20 SAY "ENTER PASSWORD" SET COLOR TO W/B, N @12,36 GET RESP READ SET COLOR TO W+/B IF RESP = 'ABG'DO CASE CASE RESP = UPPER('ABG')DO C:MENUA **OTHERWISE** EXIT **ENDCASE ENDIF ENDDO** RETURN \* MAIN MENU PROGRAM CLEAR SET TALK ON SET BELL OFF SET COLOR TO W+/B CHOICE1 = SPACE(1)@2,2 SAY "WRITTEN BY ABUBAKAR BALA GARBA" COLOR B + \* @22,7 SAY " REGISTRATION NUMBER PGD/MCS187/96" @4,2 SAY "OPENING MENU FOR THE COMPLAINTS REGISTER FORM" SET COLOR TO G/B @5,6 TO 8,45 DOUBLE @8,6 TO 10,45 DOUBLE @10,6 TO 12,45 DOUBLE @12,6 TO 14,45 DOUBLE @14,6 TO 16,45 DOUBLE SET COLOR TO W+/B @7,8 SAY " [0] EXIT TO DOS" @9,8 SAY "[1] ADD RECORDS"

@11,8 SAY "[2] MODIFY RECORDS" @13,8 SAY "[3] DELETE RECORDS"

```
@15,8 SAY "[4] PRINT RECORDS"
@17,8 SAY ""
WAIT "YOUR CHOICE PLEASE" TO CHOICE1
DO CASE
  CASE CHOICE1 = '0'
    QUIT
  CASE CHOICE1 = '1'
    DO P3
   CASE CHOICE1 = '2'
    DO P4
   CASE CHOICE1 = '3'
    DO P6
   CASE CHOICE1 = '4'
    DO PP
ENDCASE
* PROGRAM TO ADD RECORDS
CLEAR
SET TALK ON
SET ECHO OFF
SET CONFIRM OFF
REPLY = SPACE(1)
DO WHILE .T.
CLEAR
USE CMP1
APPEND BLANK
@1,1 SAY "PROGRAM TO ADD RECORDS"
WAIT
SET FORMAT TO CMP1
READ
@19,2 SAY ""
WAIT"DO YOU WANT TO ADD MORE RECORDS (Y/N)" TO REPLY
IF UPPER(REPLY) = "N"
DO MENUA
ENDIF
ENDDO
RETURN
* PROGRAM TO DELTE RECORDS
MSNO = 0
@1,25 SAY " DELETE PROGRAM"
WAIT
USE CMP1
@3,13 SAY "ENTER SERIAL NUMBER" GET MSNO PICT "9999"
READ
LOCATE FOR S = MSNO
```

IF EOF()

@20,15 SAY "RECORD NOT FOUND"

WAIT

RETURN

**ENDIF** 

SET FORMAT TO CMP1

READ

@22,1 SAY ""

WAIT "DO YOU WANT TO DELETE THE ABOVE RECORD Y/N?" TO REPLY

IF UPPER(REPLY) = 'Y'

DELETE

PACK

**ENDIF** 

CLOSE ALL

**RETURN** 

\* MODIFY PROGRAM

SET TALK OFF

SET STATUS OFF

MSNO = 0

STORE .T. TO C

DO WHILE .NOT. EOF()

USE CMP1

APPEND BLANK

@10,20 SAY "ENTER SERIAL NUMBER OF RECORDS TO BE MODIFIED"GET MSNO PICT "9999"

READ

LOCATE FOR S = MSNO

IF EOF()

@12,20 SAY " WRONG CODE"

**RETURN** 

**ENDIF** 

**CLEAR** 

SET FORMAT TO CMP1

READ

@22,10 SAY "RECORD MODIFIED"

WAIT "MODIFY ANOTHER RECORD(Y/N)?"TO REPLY

IF UPPER(REPLY) = 'N'

DO MENUA

**ENDIF** 

**ENDDO** 

**RETURN** 

SET TALK OFF

SET CONFIRM OFF

SET STATUS ON

SET TALK OFF

SET STATUS OFF

USE CMP1

SET DEVICE TO PRINT

DO WHILE .NOT. EOF()

LINE = 0

@1,2 SAY "PRINT PROGRAM FOR COMPLAINT REGISTER FORM"

@2,1 SAY REPL("-",132)

@3,1 SAY "S-NO"

@3,7 SAY "DATE"

@4,7 SAY "RECEIVED"

@3,16 SAY "F-NO"

@3,21 SAY "NAME/ADDRESS OF COMPLAINANTS"

@3,62 SAY:NATURE OF COMPLAINTS"

@3,112 SAY "ACTION/DECISSION"

@4,112 SAY "TAKEN AND DATE"

@5,1 SAY " REPL("-",132)

LINE = 6

DO WHILE .NOT. EOF()

@L1NE,1 SAY S

@L1NE,7 SAY D

@L1NE,16 SAY F

@L1NE,21 SAY N

@L1NE,62 SAY NA

@L1NE,112 SAY A

LINE = LINE + 2

IF LINE = 24

LINE = 1

@LINE,1 CLEAR

ENDIF

SKIP

**ENDDO** 

**ENDDO** 

**CLOSE ALL** 

**RETURN** 

### APPENDIX F

### PROGRAM CODE (MONTHLY COMPLAINT CHARRT)

SET CONFIRM OFF SET TALK OFF SET STATUS OFF SET BELL OFF SET ESCA OFF RESP = SPACE(3)DO WHILE .T. @12,20 SAY "ENTER PASSWORD" SET COLOR TO W/B, N @12,36 GET RESP READ SET COLOR TO W+/B IF RESP = 'ABG'DO CASE CASE RESP = UPPER('ABG') DO C:MENUC **OTHERWISE EXIT ENDCASE** ENDIF **ENDDO RETURN** 

\* MAIN MENU PROGRAM

CLEAR

set status off

SET TALK ON

SET BELL OFF

SET COLOR TO W+/B

CHOICE1 = SPACE(1)

@2,2 SAY "WRITTEN BY ABUBAKAR BALA GARBA" COLOR B+\*

@22,7 SAY " REGISTRATION NUMBER PGD/MCS187/96"

@4,2 SAY "OPENING MENU FOR MONTHLY COMPLAINT CHART"

SET COLOR TO G/B

@5,6 TO 8,45 DOUBLE

@8,6 TO 10,45 DOUBLE

@10,6 TO 12,45 DOUBLE

@12,6 TO 14,45 DOUBLE

@14,6 TO 18,45 DOUBLE

SET COLOR TO W+/B

@7,8 SAY " [0] EXIT TO DOS"

```
@9,8 SAY "[1] ADD RECORDS"
@11,8 SAY "[2] MODIFY RECORDS"
@13,8 SAY "[3] DELETE RECORDS"
@15,8 SAY "[4] LIST RECORDS"
@17,8 SAY "[5] PRINT RECORDS"
@19,8 SAY ""
WAIT "YOUR CHOICE PLEASE" TO CHOICE1
DO CASE
   CASE CHOICE1 = '0'
    QUIT
   CASE CHOICE1 = '1'
    DO R3
   CASE CHOICE1 = '2'
    DO R4
   CASE CHOICE1 = '3'
    DO<sub>R6</sub>
   CASE CHOICE1 = '4'
    DO PP1
   CASE CHOICE1 = '4'
    DO PP11
ENDCASE
* PROGRAM TO ADD RECORDS
CLEAR
SET TALK ON
SET ECHO OFF
SET CONFIRM OFF
REPLY = SPACE(1)
DO WHILE .T.
CLEAR
USE CMP2
APPEND BLANK
@1,1 SAY "PROGRAM TO ADD RECORDS"
WAIT
SET FORMAT TO CMP2
READ
@19,2 SAY ""
WAIT"DO YOU WANT TO ADD MORE RECORDS (Y/N)" TO REPLY
IF UPPER(REPLY) = "N"
DO MENUC
ENDIF
ENDDO
RETURN
clear
CLEAR ALL
```

PROGRAM TO DELTE RECORDS

SET TALK OFF

SET ECHO OFF

SET STATUS OFF

MSNO = 0

@1,25 SAY " DELETE PROGRAM"

WAIT

USE CMP2

@3,13 SAY "ENTER MONTH OF RECORD TO DELETE" GET MSNO PICT "9999"

READ

LOCATE FOR MNTH = MSNO

IF EOF()

@20,15 SAY "RECORD NOT FOUND"

WAIT

**RETURN** 

**ENDIF** 

SET FORMAT TO CMP2

READ

@22,1 SAY ""

WAIT "DO YOU WANT TO DELETE THE ABOVE RECORD Y/N?" TO REPLY

IF UPPER(REPLY) = 'Y'

DELETE

**PACK** 

**ENDIF** 

CLOSE ALL

RETURN

SET TALK OFF

SET CONFIRM OFF

SET STATUS ON

USE CMP2

SET DEVICE TO PRINTER

SET PRINT ON

@1,1 SAY "LIST AND PRINT PROGRAM FOR MONHTLY COMPLAINT CHART"

@2,1 SAY REPL("-",79)

@3,1 SAY "SNO"

@3,5 SAY "MONTH"

@3,16 SAY "NO.OF"

@4,16 SAY "CASES"

@5,16 SAY "BRGHT."

@3,23 SAY "NO.OF"

@4,23 SAY "CASES"

@5,23 SAY "DISPOS."

- @3,30 SAY " NO.OF"
- @4,30 SAY " CASE"
- @5,30 SAY " PEND"
- @6,30 SAY " (i)"
- @3,37 SAY "NO.OF"
- @4,37 SAY "CASES"
- @5,37 SAY "RECIEV"
- @3,44 SAY "NO.OF"
- @4,44 SAY "CASES"
- @5,44 SAY "OUTSIDE"
- @3,51 SAY "NO.OF"
- @4,51 SAY "CASES"
- @5,52 SAY "SATIS."
- @6,51 SAY "DISPOS"
- @7,51 SAY "(iv)"
- @3,58 SAY "NO.OF"
- @4,58 SAY "CASES"
- @5,58 SAY " PEND."
- @6,58 SAY "(iv)"
- @3,66 SAY "TOTAL"
- @4,66 SAY "NO.OF"
- @5,66 SAY "CASES"
- @6,66 SAY "DISP."
- @7,64 SAY "(ii-vi)"
- @3,74 SAY "TOTAL"
- @4,74 SAY "NO.OF"
- @5,74 SAY "CASES"
- @6,74 SAY "PEND."
- @7,74 SAY "(iii)"
- @8,74 SAY "(vii)"
- @9,1 SAY REPL("-",79)
- SNO = 0
- LINE = 11
- USE CMP2
- GO TOP
- DO WHILE .NOT. EOF()
- ROW = ROW + 1
- SNO = SNO + 1
- @LINE,1 SAY S
- @LINE,5 SAY MNTH
- @LINE,16 SAY NCA
- @LINE,23 SAY NCB
- @LINE,30 SAY NCC
- @LINE,37 SAY NCD

```
@LINE,44 SAY NCE
@LINE,51 SAY NCF
@LINE,57 SAY NCG
```

@LINE,64 SAY NCGG

@LINE,74 SAY NCH

LINE = LINE + 1

SNO = SNO + 1

IF LINE = 20

WAIT

LINE = 1

@LINE,1 CLEAR

**ENDIF** 

SKIP

**ENDDO** 

WAIT

SET TALK ON

SET CONFIRM ON

SET STATUS OFF

USE

**CLEAR** 

SET DEVICE TO SCREEN

RETURN

\* MODIFY PROGRAM

SET TALK OFF

SET STATUS OFF

SET SCOREBOARD OFF

MSNO = 0

STORE .T. TO C

DO WHILE .NOT. EOF()

USE CMP2

APPEND BLANK

@10,20 SAY "ENTER SERIAL NUMBER OF RECORDS TO BE MODIFIED"GET MSNO PICT "9999"

READ

LOCATE FOR S = MSNO

IF EOF()

@12,20 SAY " WRONG CODE"

RETURN

**ENDIF** 

CLEAR

SET FORMAT TO CMP2

READ

@22,10 SAY "RECORD MODIFIED"

WAIT "MODIFY ANOTHER RECORD(Y/N)?"TO REPLY