

**COMPUTERIZED ADMISSION SYSTEM FOR NIGERIAN  
POLYTECHNICS: (Case Study of The Federal Polytechnic, Bida)**

*BY*

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**A PROJECT SUBMITTED TO THE DEPARTMENT OF MATHEMATICS  
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**FEDERAL UNIVERSITY OF TECHNOLOGY  
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CERTIFICATION

I certified that this research work carried out by IKUGHUR ATSUA JONATHAN of the department of Mathematics and computer science, school of Post-Graduate Studies, Federal University of Technology, Minna under my Supervisor.

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Date

## DEDICATION

This piece of work is dedicated to my family and all the  
Lende's Descendants.

## ACKNOWLEDGEMENT

My greatest thanks to GOD ALMIGHTY, who in his infinite mercy, sustained me through the course of my studies for this program.

My special thanks goes to my supervisor, **Mallam Isah Audu** who made this work possible through his meaningful advices. I also wish to express my sincere gratitude to the Head of Department of mathematic and computer studies, **Dr. K.R Adeboye** and all the lecturers in the Department.

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## ABSTRACTS

This project is a careful study of the present Admission system in the Federal Polytechnic, Bida.

In addition to improving the existing system, it attempts to design a new Admission Processing System whereby substantial and sensitive parts of the exercise will be done with the use of Computer.

The Admission program is developed as a complete package made up of six main routines namely, **Data entry, Modification, Deletion, Viewing, Report Generation and Processing Routines.**

The program Algorithm is the Flowchart and the program codes are written in dBaseIV Language.

Finally, the output (results) of the program is presented and discussed in here.

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## CHAPTER ONE

### INTRODUCTION TO ADMISSION PROCESSING

#### 1. **BACKGROUND OF THE STUDY**

Admission into higher institutions in Nigeria in the recent times has become competitive. Competitive in the sense that it is surrounded with several cases. Ikughur (1995) identified these cases to include:

- a. There are many applicants seeking to secure Admission for higher studies in several disciplines. Record shows that the number of applicants and hence, enrolment has been increasing with time. (See Appendix A)
- b. The number of colleges are few, with limited capacity. Besides, even if the present capacity were to be exceeded by a significant proportion, the demand would yet be unfilled.

What is important is perhaps, not the number of applicants but those who, in the pursuit, would be able to withstand challenges posed by academics and would thereafter, pursue the ideal protection of their Nation in all ramifications.

To be eligible for admission depends on National policy toward education in particular and the policy of the school in particular. For instance, in order to keep a society of men and women that are literate, the Federal Government have in the past evolve policies that were geared toward Mass Education. We had the Universal Primary Education (UPE). Many post-primary and tertiary institutions were established.

Harold (1978) stated that "for some Schools or institutions, all applicants are considered for admission. Some other schools consider applicants who have sat and passed an entrance examination while some others would require some great deal of paper work where a formal application form stating details of personal history, interests educational achievements, plans etc"

Almost all the Polytechnic in Nigeria are owned by the various Governments (State or Federal) and their operations are regulated by the National Board For Technical Education (NBTE). These polytechnic run program leading to the award of National Diploma (ND), and Higher National Diploma (HND) and Certificate Courses (Intermediate and Advanced).

Admission into National Diploma Program is exercised by the Joint Admissions and Matriculation Board. Here, applicants sit for qualifying examination (Polytechnic and Colleges Of Education Matriculation Examination) and applicants who have passed the examination with the required points (Cut-off points) are selected for offer of admission.

For the Higher National Diploma Program, no such entrance examination is conducted. rather, the applicant completes a formal form. To be eligible here requires that the applicant satisfies the pre-requisites and once such applicant is not qualified, is eliminated from the exercise.

In the recent past, it was easy to process admission. However, with the increasing complexities owing to the cases enumerated above and several other problems associated with the conventional method of data processing, there is the need to develop a system that shall meet up with the challenges of the time, that is a better way of processing admission.

One way of coping up with the situation is by Automating the system whereby computers are used to partially or fully process Admission.

The Federal Polytechnic, Bida is one of the higher Institution in Nigeria today that has grown significantly; in size and in population and need to automate her information system to take care of not only the Admission but also her payroll, student records, personnel records, Library, and Matriculation

numbering etc.

It is therefore, on this background that this research seeks to study the existing system with the view to identify the weaknesses and bring out a design which, if implemented would ease the processing of Admission in particular and the entire admission exercise in general.

## 2 **STATEMENT OF THE PROBLEM.**

The careful observation of the existing system revealed several problem areas beginning from the numbers of the application forms being sold, decentralization of admission processing, method of admission processing and so on. These problems render the present system so complex, inefficient and expensive. Hence this project titled, **computerized Admission System for Nigerian Polytechnic** uses the Federal Polytechnic Bida as a case study and will seek to formulate a system that will address and improve the current system.

## 3 **AIMS AND OBJECTIVES OF THE STUDY.**

The aims and objectives of this research work is amongst others, to:

- a. provide a better alternative way of admission processing in particular and the entire admission exercise in general that will serve to improve and perhaps replace the existing system.
- b. design a system that will minimize the cost of the entire admission exercise.
- c. develop the necessary software that will be useful for the exercise.
- d. make appropriate recommendations to those concerned with the research work.

## 4 **HYPOTHESIS**

The claim made here is that the old and the new system perform the same task but in different ways of which the new system performs better.

## 5 **JUSTIFICATION**

Having been opportuned to process admission for the

Department of Mathematics, Statistics and Computer Studies of The Federal Polytechnic, Bida the researcher was privileged to the conventional or manual approach. Apart from its several defects, it is very cumbersome and if replaced, will

- a. ease the work of the Admission Officers
- b. save the polytechnic of the time and cost associated with the Admission exercise and of course, convenience
- c. perform the task objectively without unnecessary human interference.

#### 6 **SCOPE OF THE STUDY**

Presently, the Polytechnic run programmes leading to the award of the following:

- a. Higher National Diploma
- b. National Diploma
- c. Certificate courses
- d. Remedial (Preliminary Studies)

These programmes are ran in different disciplines. For the purpose of this study, only admission into HND Program will be considered.

#### 7 **BRIEF HISTORY OF THE FEDERAL POLYTECHNIC BIDA**

According to the Polytechnic Information handbook (1992), the Polytechnic began as Federal College of Technology, Kano on the 1st March 1977. Following the Federal Government decision to transfer the college to Bida, the college was finally moved to Bida on the 27th July 1977. The college then known as Bida College of Technology was temporarily accommodated at the Government Technical College, Eyagi and later on its temporary facilities along Wuya Road, Bida. The permanent site of the Polytechnic comprises of a land 2km x 2km and lies between kilometre 7 and kilometre 9 along Bida-Doko road. Physical planning of the site commenced early in 1979 and by the end of October, 1979 the Administrative unit and some Academic departments moved to the permanent site. By the end of 1982/83 session, all arms of the Polytechnic

had been fully settled on the permanent site.

The Polytechnic admitted its first set of students in April 1978 for the 1977/78 session with an enrolment of 211 students of which 154 students finally graduated with the then Nigerian National Diploma (NND) in August 1981. Thereafter, the students enrolment continues to grow yearly. ( see appendix A).

The development of the permanent site of the polytechnic was planned to proceed in phases. Phase 1 was designed for a target students of 1500. This could rise up to 2500 while Phase 2 had a target of 6000 students. Due to inadequate funding, the polytechnic still operate on facilities meant for 1500 students despite the tremendous increase in the students' population.

Presently, the Polytechnic has five schools namely:-

- a. School of Applied Arts and Science
- b. School of Business Management and Administration
- c. School of Construction Engineering Technology
- d. School of Engineering Technology
- e. School of Preliminary Studies

Each of the School comprises of several departments. At present, HND programmes are run in the following areas:-

- a. Accountancy
- b. Business Administration
- c. Secretariat Studies
- d. Marketing
- e. Science Laboratory Technology with the following options:-
  - i. Chemistry
  - ii. Biology
  - iii Biochemistry
  - iv Chemistry/Biochemistry
  - v Physics/Electronics
  - vi Microbiology
  - vii Biology/Microbiology
  - viii Biochemistry/Microbiology

- f. Statistics
- g. Agricultural Engineering with the following options
  - i. Farm Power and Machines
  - ii. Soil and Water Engineering
  - iii. Post Harvest Technology
- h. Chemical Engineering
- i. Civil Engineering with the following options:-
  - i. Structures
  - ii. Transportation
- j. Electrical Engineering with the following options:-
  - i. Power and machines
  - ii. Electronics and Telecommunications
- k. Building
- l. Quantity Surveying

## CHAPTER TWO

### **CASE STUDY OF ADMISSION PROCESSING**

#### **.1 INTRODUCTION**

This chapter seeks to make a survey of the existing system of admission processing in the institution. It will also investigate in order to ascertain the strength and weaknesses of the system with the view to determine whether there is the need for computerization or not.

#### **2 ADMISSION EXERCISE UNDER THE CURRENT SYSTEM**

The present system of admission exercise is completely manual. It has the following features:-

- a. A pair of form is sold to the applicants and upon completion of the form, it is sent to the Academic unit where it is received.
- b. The Academic Unit acknowledges the receipt of the form
- c. The form is registered by giving it a code number. For example BN/HND/STAT/001 meaning that the applicant is the first on the Benue State list and is applying for HND program in Statistics
- d. When adequate forms are received, they are then despatched to their respective departments, keeping one copy of each in the Academic Affairs Unit.
- e. The department sorts out the forms according to state of origin of the applicant as well as registration number.
- f. The department prepares the list of applicant on the Admission Processing Format. See appendix B
- g. It also determines whether the candidate is suitable or not for the offer of Admission based on the criteria laid by the National Board for Technical Education (NBTE).
- h. It prints out at least 40 copies of the shortlisted names to be circulated to members of the Academic Board.

The Academic Board in turn does the selection from amongst the eligible candidates. When the exercise is

completed, the Registrar prints out list of selected candidates and thereby send them with notice of the offer of Admission.

### 2.3 ADMISSION CRITERIA

This refers to those standards laid down by the institution in accordance with the NBTE requirements for Admission into HND programme. These criteria are:-

- a. Candidates must possess a National Diploma Certificate from an accredited institution with a minimum of Lower credit grade.
- b. Candidate in (a) above must spend at least one year of Post-National Diploma working experience in the relevant field.
- c. In addition, the candidate must have at least four credit passes in the relevant subjects at the ordinary level.
- d. A holder of National Diploma certificate with a grade of pass may be considered for admission provided that such candidate satisfies the ordinary level requirements and have had at least two years of Post-National Diploma working experience in the relevant field.
- e. Candidates with O-level deficiencies and have undertaken a one year remedial program (PRE-ND) is assumed to have satisfied the O-level requirements provided that such person has passed all the subjects offered during the remedial period.

The applicant is assumed to have satisfied other requirements such as age. Be it as it may, the offer is not automatic. Candidates are selected from each state of the federation. Sometimes, some states are given a higher priority because they fall into what is called catchment area and also educationally disadvantaged area.

Below are the basic O-level requirements for admission exercise according to each department:-

TABLE A.

Subjects	Acct	Bam	Sec	Mkt	Stat	SIT	BLD	QS	ELEC	CIV	AGRIC
English	"	"	"	"	"	"	"	"	"	"	"
MATHS	"	"	"	"	"	"	"	"	"	"	"
Fur-Math	"	"	"	"	"	"	"	"	"	"	"
Econs	"	"	"	"	"	"	"	"	"	"	"
Comm	"	"	"	"	"	"	"	"	"	"	"
Govt	"	"	"	"	"	"	"	"	"	"	"
B/Methods	"	"	"	"	"	"	"	"	"	"	"
Physics	"	"	"	"	"	"	"	"	"	"	"
Chemistry	"	"	"	"	"	"	"	"	"	"	"
Bio/Agric	"	"	"	"	"	"	"	"	"	"	"
Accts	"	"	"	"	"	"	"	"	"	"	"
Statistics	"	"	"	"	"	"	"	"	"	"	"
T/Drawing	"	"	"	"	"	"	"	"	"	"	"

Source: Academic Affairs Units, Federal Polytechnic, Bida.

#### 2.4 PROCESSING ADMISSION WITH THE CURRENT SYSTEM

To be able to understand and appreciate the working of the current system, we need to review some aspects of data processing in order to identify the numerous problem areas.

According to Oliver (1990), "data processing is the name given to the process of providing meaningful information by collecting all items of data together and performing some operation on them to extract the required information". The process is done in stages: Data origination, preparation, Input, Process, Output using one or a combination of methods: manual, mechanical and or electronic data processing with the use of computer. In fact, the choice of method of data processing depends on the size and type of business, the timing aspects, that is, of information sensitive to time and the link between application where information can be centrally controlled as a single pool and can be assessed by several users.

Thus, the present system makes use of the conventional method. Although some mechanical devices such as typewriters are often used in performing this task.

#### 2.5 PROBLEM WITH THE PRESENT SYSTEM

##### a. The storage of Application Forms:

The completed forms are stored in both the Academic Affairs and the Department thereby occupying much office space hence, duplicating the role and increasing redundancy as one pair of the application form remains unused for a longer time. This is irrelevant and it amounts to wastage of resources.

##### b. Data Recording and Sorting:

There is usually a large number of Application Forms that are received and because the call for submission of Shortlisted candidate list is done at a given time after the dateline for submission, the sorting and recording is deferred until then. This implies a delay

in work due to this approach.

c. Data Processing:

This starts with making entries on the Admission Format Sheet by extracting the essential information about a candidate and completing the form in a specified way. A minor error may be corrected using the liquid correction fluid while a major error may render the format invalid. Whichever the case may be, causes poor quality output and of course, wastage of resources (time, papers, ink and so on).

d. Data Deletion and Updating:

Sometimes, it becomes necessary to update records. This is not an easy task under this system as it may mean performing the task entirely and any reoccurrence of such error may mean repeating the task unendingly. Thus cases of omission and transposition of data fields or records are not easily resolved except new entries are made.

e. Data Storage and Retrieval:

Information are stored on papers and kept in cabinets. Access top the information means searching the entire file until the information is found. If the information is large, it then requires a large storage space and the retrieval of such information may be time consuming.

f. Data Manipulation:

This entails assessing the admission criteria to determine the candidates' eligibility. However, conducting a routinely repetitious operation like this with manual method wastes time. Besides, it is boring and there is the likelihood of some deliberate human errors which could lead to offering admission to a non-eligible candidate.

g. gwme taken by the present System:

The present system is slow and takes a longer time, perhaps, days or weeks to get records processed

(especially where there are errors recurring thereby needing to be continuously corrected).

## 2.6 **BENEFIT OF COMPUTERIZATION**

To be able to discuss the benefit of computers and of course automating the admission system, it will worth a while to note what computer can do.

Hall (1983), in comparing between the man and the computer, noted that "the human, though very intelligent, creative, intuitive and self motivated easily become bored, tired and forgetful. Computer however perform a single task based on a set of instructions created by a person, works very rapidly, obeys instructions or commands exactly and repeat task untiringly.

This indicates that Computerization of the admission process would be a better alternative and it will help in achieving the following:-

- a. Making work easier and more accurate.
- b. Carrying out work, logical comparison between things as well as checking and correcting errors without being bored.
- c. Time and Cost Benefit: The amount of stationeries consumed under the existing system will be minimized. Time benefit mostly attributable to the amazingly high processing speed of the computer.
- d. Efficient storage and retrieval of information using magnetic disk, tapes and so on. it also causes the reduction of physical storage space required.
- e. It provides accurate information such that once the computer disqualifies a candidate based on the laid down criteria, the pressure on the concerned officers will be minimized.

Thus, if the present system is replaced (partially or fully), the benefit enumerated above shall be realised.

- a. **QUESTIONNAIRE:-** Questionnaires were used to fully understand the admission process and whether the management of the Federal Polytechnic, Bida would desire a change. Here all the thirteen respondents made up of Academic Heads of Departments and the Registrar (Admissions) voted for the proposed system.
- b. **RECORD SEARCHING:-**This entails going through the records of an organisation to obtaining relevant information. Such information are secondary but are useful in case study of this kind. Thus, past record on enrolment (see appendix A) were observed to study the pattern of admission.
- c. **PARTICIPATION/OBSERVATION:-** Here, the researcher took part in processing the admission for the 1996/97 session so as to understand and appreciate the problems associated with the manual method.

#### 3.4 **OBSERVATIONS**

- a. The sales of pair of admission forms is partially the cause of decentralization of admission processing.
- b. There is usually delay in the processing of admission as the concerned officers will have to wait until all forms are collected.
- c. The delay is the cause of late submission of list of candidates (shortlist) for the admission exercise.
- d. It gives room for lobbying.

#### 3.5 **DESCRIPTION OF THE NEW SYSTEM**

3.5.1 **Admission forms:** The new system demands that only one copy of the application form be issued instead of two.

3.5.2 i. **Centralisation of information processing:-** Application forms need not be despatched to the departments. Rather, the department supplies her criteria to the Admission Officer who would do the processing with his subordinates. Each department will or may send a representative at such instance to verify and validate the accuracy of the work done

## CHAPTER THREE

### **ANALYSIS AND DESIGN OF ADMISSION PROGRAM MODEL**

#### **3.1 INTRODUCTION**

System Analysis according to Hall(1983) is part of data processing which is "concerned with the investigation of the business need for information and for the design of a system to supply that information".

Oliver and Chapman(1990) sees computerization of a system to "entail more than just the automation of parts of the existing system by means of computer. Analysis of an organisation information requirements may show that the requirement will be better served by a newly designed and implemented system with the virtues of both the manual and computerized elements".

This research uses these two premises in the analysis and design of the admission system of the Federal Polytechnic, Bida.

#### **3.2 PROBLEM IDENTIFICATION**

This is as contained in item 2.5 of this project. It includes the following:-

- a. The number of forms sold to applicant amount to wastage as a result of pairing of forms
- b. the present admission processing system creates a kind of decentralization.
- c. The time taken to process admission is longer.
- d. The quality of the output is not uniform and sometimes poor.
- e. There is wastage of resources.

These problems render the present system quite expensive and inefficient.

#### **3.3 FACTS FINDING TECHNIQUES**

To be able to achieve the goal of designing a better system, a careful observation and analysis have to be made based on facts rather than guesses. Thus, the researcher gathered the facts used here through the combination of the following methods

by the Admission Officers.

- 3.5.2.ii. Relevant information pertaining an applicant shall be extracted by an assigned officer trained for the task.
- 3.5.2.iii. All extracted data are to be into the computer immediately, irrespective of the order.
- 3.5.2.iv The computer sorts the data according to course applied for and the candidates' state of origin.
- 3.5.2.v Computer perform the manipulation of data, assigning points to each applicant and determining whether a candidate is eligible or not.

**3.5.3 Kind of Output**

There shall be two kinds of output namely, the intermediate output and the final output.

- a. Intermediate output will print out the list of all candidates according to specified order for consideration by the Academic Board.
- b. The final output will comprise of all the candidates offered admission, that is the successful candidates.

**3.6.1 COMPUTING STANDARD FOR DETERMINING ELIGIBILITY**

Almost all the criteria for determining applicants' suitability are quantified except for the selection exercise which remains the discretion of the Academic Board.

**a. Grading the Qualifications**

- i. National Diploma Certificate is graded as follows

<u>Grade</u>	<u>Points</u>
Distinction	4
Upper Credit	3
Lower Credit	2
Pass	1

- ii. Pre National Diploma certificate is graded 1 point

iii. GCE "O" Level /SSCE Grading

<u>Grade</u>	<u>Points</u>
A1--A3	3
C4--C6	2
P7--P8	1
F9	0

iv. Post National diploma Working Experience.

- a. Candidates with a minimum of lower credit pass and with at least one year post qualification work experience is graded 1 point otherwise, 0 point and is automatically disqualified with the remark NQ\*\*.
- b. Candidate with a pass grade with at least two years work experience is graded 1 point otherwise, is graded 0 point and is automatically disqualified with the remark NQ\*\*

**3.6.2 CUT OFF POINTS**

For candidates with distinction at diploma level and the minimum O-level requirement, the total points (maximum) is 18

For a lower credit holder, the minimum points is 8  
Therefore any candidate eligible for admission is expected to have a minimum of 8 points in four O-level subject relevant to the course applied for. A candidate that does not have at least 8 point is automatically disqualified with a remark NQ.

**3.6.3 NON-ELIGIBILITY CASES**

- a. Candidate who does not satisfy the minimum requirement is not eligible. The remark is NQ meaning not qualified.
- b. Candidate who does not satisfy post-ND working experience has the remark NQ\*\*
- c. Candidate who does not satisfy the basic O-level requirement (especially English language and, or

Mathematics) has the remarks NQ\*.

### 3.7 TESTING PROJECT FEASIBILITY

3.7.1 **Technical Feasibility:-** At present, the Federal Polytechnic Bida has up to 25 micro-computers and the personnel needed to man the computer. The technical supports are already in place.

3.7.2 **Operational Feasibility:-** With trained manpower and workable systems, it is expected that the project will be operationally feasible.

3.7.3 **Economic Feasibility:-** The cost of conducting a detailed system investigation would be eliminated by this study. Most equipments needed are already in place. Such include: Micro-computers, printers, airconditioners, good office space, uninterruptible power supply (UPS), chairs, tables, stabilizers, diskettes, database management system (DBMS) and so on.

### 3.8 REQUIREMENT SPECIFICATION FOR THE PROPOSED SYSTEM

- a. Comprehensive list of applicants and their data
- b. Routine for data entry, modification, deletion and viewing.
- c. Report generation on the screen and sent to the printer for hard copy
- d. Data to be stored on the magnetic storage medium
- e. Database management system (DBMS)
- f. Formation of admission processing committee to coordinate the task.

### 3.9 COST AND BENEFIT ANALYSIS

a. <u>Development Cost</u> (Dc)	N	K
- System analysis and design 3 weeks, 10 hrs/day @ N4000/week	12000.	00
- Software Development and implementation 4 weeks, 10 hrs/day @ N4000/week	16000.	00
- ** Equipment Procurement	20,0000.	00
- ** Installation	6000.	00

- Personnel Training (5 days) 6 hrs/day		
@ N1,200/day	6000.	00
<b><u>TOTAL</u></b>	<b><u>240,000.</u></b>	<b><u>00</u></b>

b. System Operating Cost (Soc)

-**Equipment maintenance	50,000.	00
- program maintenance	10,000.	00
-**Labour Cost	48,000.	00
-**Utilities	12,000.	00
- Stationeries	10,000.	00
- Miscellaneous	20,000.	00
<b><u>TOTAL</u></b>	<b><u>158,000.</u></b>	<b><u>00</u></b>
<b><u>TOTAL COST = Dc + Soc</u></b>	<b>=</b>	<b><u>398,000.</u></b>

c. System benefit per annum

- savings from printing of 5,000 admission forms		
@ N30.00 each	150,000.	00
- reduced spending on stationeries	15,000.	00
<b><u>TOTAL BENEFIT: =</u></b>	<b><u>165,000.</u></b>	<b><u>00</u></b>

3.10 **OUTPUT SPECIFICATION**

a. The intermediate output has the following fields:-

- form number
- registration number
- name
- institution attended
- year of graduation
- diploma grade
- course applied for
- pre-ND
- "O" level {up to 4 subjects}
- number of credits
- points
- remarks

b. The final output consists of the following:-

- serial number
- name of candidate
- course
- points

### 3.11 INPUT SPECIFICATION

This consists of the following:-

- form number
- registration number
- surname
- other name
- institution attended
- year of graduation
- diploma grade
- year of admission
- pre-ND
- course applied for
- option
- O-level requirements {sub1, sub2.....sub6}

### 3.12 FILE AND PROCEDURE

A database file is to be created called **admission.dbf** which is the master file. Processed data is stored in **eligible.dbf** from which candidates offered admission are moved into **award.dbf**.

The procedure here are the steps which unify the whole processes together to produced the desired result. It involves both the manual and computer.

The manual aspects requires that the clerks collects and enter data into the data entry format, as well as considering the eligible candidates by the Academic Board.

The computer then performs the manipulation required to give the output in the manner so desired.

## CHAPTER FOUR

### SOFTWARE DEVELOPMENT AND EXPERIMENTATION

#### 4.1 INTRODUCTION

The system to be implemented is carefully designed to process admission into Nigerian Polytechnic with emphasis on the Federal Polytechnic, Bida. The program has been coded, tested and is operational.

#### 4.2 CHOICE OF LANGUAGE

The software in use here is the **database management system** and **dBaseIV** for the program development. It provides a relational database structure where data are entered and stored into the database file in rows and columns called records and fields respectively. It is very useful especially for record processing of this kind.

#### 4.3 DATABASE MANAGEMENT SYSTEM

This is a complex software system which constructs, expands and maintain data in the base. It also allocates storage to data, maintain indices so that any required data can be retrieved and so that separate data item in the base can changed as needed.

DBMS maintain data in the base by **adding, deletion, modification, viewing** and so on.

Files can be processed sequentially or serially. It also has the function of providing security for the data in the base against unauthorized user and against corruption.

DBMS as a software is therefore aimed at the following:-

- a. **Data Integration:** where information from many files can be assessed, coordinated and operated upon as though they were from a single file. It is also possible for two or more applications to share data in the base.
- b. **Eliminating redundancy:** Redundancy occur when the data in the base cannot be arranged to suit all application programs accessing them. If this happens, some data

may appear in more than one file leading to wastage of storage space and duplication of efforts during data entry.

- c. **Achieving Data Independency:** Which is rather an insulation of application programs from the physical or logical storage of data in such a way that it allows modifications in the contents and organisation of the data without reprogramming and vice versa.
- d. **Centrally Controlled:** Here, data and operations on data are centrally controlled and this leads to a better management of data by enforcing standard for all users.
- e. **Achieving Data Integrity:** Duplication is eliminated giving room for consistent information.

#### 4.4 SOFTWARE DEVELOPMENT

The program developed here is called **PGD96129 PROGRAM**. In order to access this program, the user is expected to type in the command **do pgd96129** at the Dot Prompt. upon pressing the <enter> key, a message is displayed (see appendix E) and access validation gate is open for the user to enter password. If the correct password is entered, the program displays another message and the mainmenu whereby the user is expected to select from the options listed below:-

- i. **A**.....Add record(s)
- ii. **M**.....Modify record(s)
- iii. **D**.....Delete record(s)
- iv. **P**.....Process Record(s)
- v. **R**.....Generate report(s)
- vi. **V**.....View record(s)
- vii. **E**.....Quit/Exit Database

##### i. **Option A: Add Record(s)**

Once this option is selected, the system provides the user with a blank data entry routine (see appendix F) to make data entries through the keyboard. The user is provided with the opportunity

to check the accuracy of the data entered. If the data are correct, they are saved automatically in the database file otherwise, it prompt the user to re-enter the data again. The user can add as much records as possible irrespective of the order. When the data entry exercise is completed, the program returns to the mainmenu.

ii. **Option M: Modify Record(s)**

This option allows the user to modify record(s) in the **admission.dbf** file. The user can remove the duplicated records in order to create more space. Correction can be made here. See appendix G

iii. **Option D: Delete Record(s)**

This module provides the user the opportunity to remove record(s) from the base. See appendix H

iv. **Option P: Process record(s)**

As soon as data entry is completed and all modifications done, the next task is to have the record processed in order to assign points and remarks. This module carries out this task and the result of the processed data are stored into **eligible.dbf** file.

v. **Option V: View Record(s)**

This allows the user to view the contents of his database using the browse.

vi. **Option G: Generate Report(s)**

This is a technical part of the program. It comprises of the following options in the submenu.

- F.....Final report
- I.....Intermediate report
- P.....Print final report
- E.....Exit

This section of the program serves to link **eligible.dbf** with **award.dbf**.

vii. **Option E: Exit/Quit Database**

This option terminates the running of the program

and returns the user to the dot prompt or the control panel as the case may be.

#### 4.5 PROGRAM ALGORITHM

The algorithm used for the design of this program is the Flowchart. Holmes(1992) have it that it provides a means of designing a computer program independent of any make or computer language by the use of "symbols that represent specific activities with the symbols connected by arrowed lines indicating the direction of flow, usually from top to the bottom of the page". Holmes(1992) added that "it also indicates the ingredient of structured programming, the sequence, selection, repetition and procedures or sub-routines as the case may be".

#### 4.6 PROGRAM TESTING

Here, four basic elements are necessary and are provided in the package developed for the new system. These are:-

- a. The routines for data entry, modification, deletion, processing, viewing and report generation.
- b. The data used for testing the package (See appendix J)
- c. The intermediate output generated by the program can be see in appendix K
- d. The Final output can be seen in appendix L

#### 4.7 STAFF TRAINING

The operational staff concerned with the use of the software are expected to undergo at least one week of intensive training.

#### 4.8 CHANGEOVER

The change from the old system to the new one is expected to be a **direct** changeover where all the element of the old system are replaced with the new one. The date of Changeover shall be determined by the management of the Federal Polytechnic, Bida.

## CHAPTER FIVE

### **SUMMARY FINDINGS, CONCLUSION AND RECOMMENDATION**

#### **5.1 SUMMARY**

The Federal Polytechnic, Bida which is the case study presently uses the conventional method in processing her admissions. This gives rise to several problem areas as discussed in the previous chapters.

In trying to accomplish the aim of this research, some facts finding techniques were used to gather relevant data. Questionnaire was administered on the heads of Academic Departments and the Registrar (Academics) and they all favoured the new system.

The feasibility study indicates that the project will technically, economically and operationally feasible. It is based on this background that the admission criteria were quantified and a program designed, coded, tested and is found workable. The package developed uses database management system which is very efficient in record processing.

The program is made up of six principal modules which include the routine for data entry, modification, deletion, viewing, processing and report generation. The output of the program can be seen in appendices\*\*

#### **5.2 FINDINGS**

The findings of this research work are partly listed in item 3.4 of this work. These include:-

- a. The old system is not suitable owing to its numerous disadvantages. Consequently, the new system is preferable.
- b. The management of the Federal polytechnic, Bida have given their support for the system.
- c. It will cost N398,000.00 to put the system in place
- d. The institution stand to gain N165,000.00 annually as the new system will create a sort of cost saving due to reduced spending on material and so on.
- e. The new system will be centralised, in which case, it

will reduce several costs in terms of money, men, material and time.

f. It will take lesser time to process records

g. It will occupy a lesser space.

### 5.3 CONCLUSION AND RECOMMENDATION

Computerising the admission process for higher institution has not been an easy task in our society where there are several interests: quota, Federal character, Educationally disadvantaged states, personal interests and so on. Whatever be the case, the package considered at least, almost every interest associated with admission exercise. It ensures that only candidates with at least the minimum entry requirements are eligible for the offer of admission. This is so because, while interests are being considered, the essential factor should be the main object for which educational institutions are established as such, the national interest must take precedence over all others.

Alade (1994) stated that "since the world today is now in the computer age and virtually everything is going computerised, information is made available at the finger tips of man through information technology which is 100% computer oriented. This pre-supposes that if we must take action or make good decisions, then the information needed must be timely. In this regards, it will be reasonable to conclude that the admission system of the Federal Polytechnic, Bida and other higher institutions in Nigeria be automated. Such system could replace the existing one in a kind of direct changeover.

For a new institutions or those without computers, they need to procure micro computers arises. This work does recommend a micro computer preferably, **Pentium** with the following features.

a. Hardisk Drive of 1.6 Gigabytes

b. RAM size of 8 MB upgradable to 72 MB

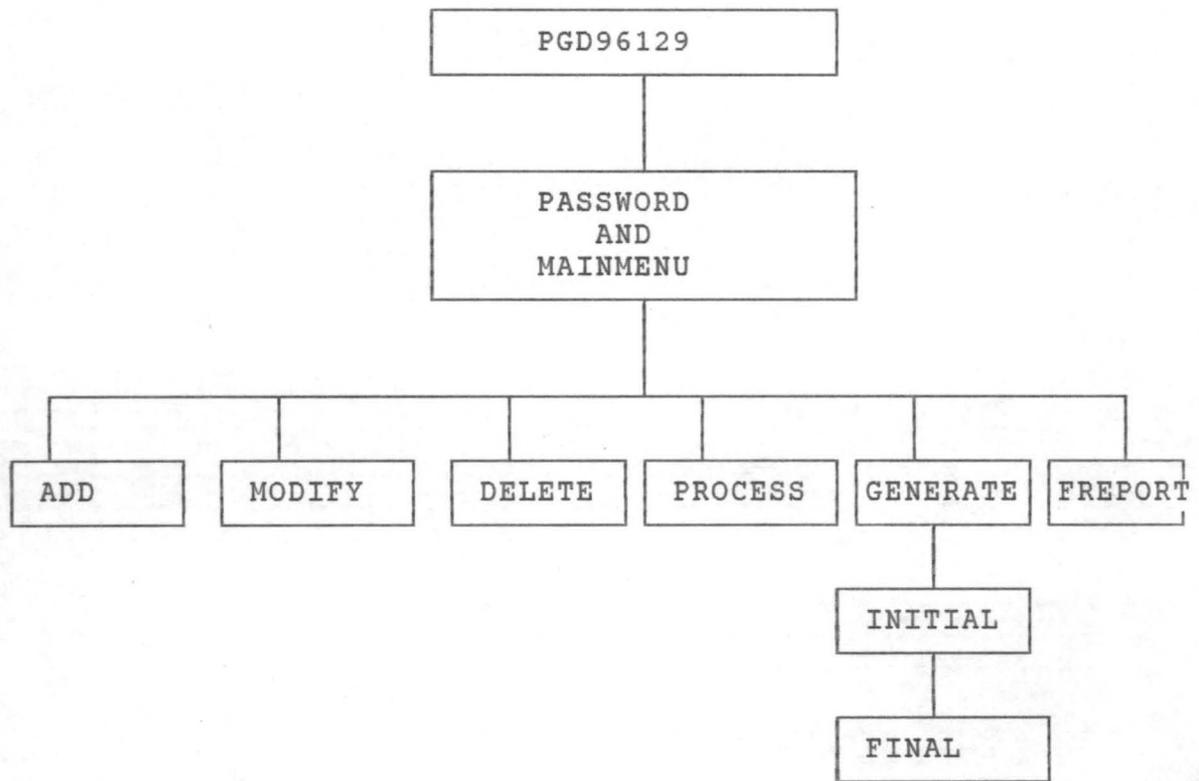
c. Speed/Clock of 100 MHz

APPENDIX A

NUMBER OF REGISTERED STUDENTS FOR THE PERIOD 1980-1997

<u>SESSION</u>	<u>POPULATION</u>
1977/78	211
1978/79	83
1979/80	147
1980/81	162
1981/82	1209
1982/83	1442
1983/84	1464
1984/85	1704
1985/86	1908
1986/87	2173
1987/88	2377
1988/89	2067
1989/90	2509
1990/91	2409
1991/92	3747
1992/93	4700
1993/94	5880
1994/95	7023
1995/96	9303
1996/97	12131

ADMISSION PROGRAM STRUCTURE.



SPECIMEN OF ADMISSION PROCESSING FORMAT

SR. NO.	FORM NO.	REG. NO	NAME	INSTITUTE ATTENDED	YR OF GRAD	DIP. GRADE	CGPA

MATHS	ENG	SUB3	SUB4	SUB5	SUB6	SUB7	REMARKS

APPENDIX D

PROGRAM MAINMENU

28/02/98

12:03:51

THE FEDERAL POLYTECHNIC, BIDA  
COMPUTERIZED ADMISSION SYSTEM  
PROGRAM MAINMENU  
=====

TASK	TASK DESCRIPTION
A.....	ADD RECORD(S)
M.....	MODIFY RECORD(S)
D.....	DELETE RECORD(S)
V.....	VIEW RECORD(S)
P.....	PROCESS RECORDS
G.....	GENERATE REPORT
E.....	EXIT

enter your choice ■

APPENDIX E  
ACCESS VALIDATION GATE

USERS' NAME

enter users' name

USERS' PASSWORD

enter users' password

APPENDIX F

DATA ENTRY ROUTINE

THE FEDERAL POLYTECHNIC, BIDA

DATA ENTRY ROUTINE

ADD  
RECORD

FORM NO: 1008            REG NO: LA001            COURSE APPLIED: STAT

SURNAME: MATTI B            OTHER NAME: F.O

INSTITUT ATTENDED: BIDA            YEAR OF GRADUATION: 1996

COURSE OPTION: STAT            YEAR OF ADMISSION: 1998

DIP GRADE: UC            PRE\_ND: -

SUB1: 6                            SUB2: 6                            SUB3: 3

SUB4: 4                            SUB5 0                            SUB6 0

————— COURSE: STAT —————

SUB1: ENGLISH                            SUB2: MATHEMATICS

SUB3: STATISTICS/ECONOMICS            SUB4: GEO/PHYSICS

SUB5: BIO/AGRIC                            SUB6: GOVT/FUR MATHS

enter any four (4) subjects for from the above ■

APPENDIX G

DATA MODIFICATION ROUTINE

THE FEDERAL POLYTECHNIC, BIDA

DATA MODIFICATION ROUTINE

MODIFY

RECORD

FORM NO: 1008            REG NO: LA001            COURSE APPLIED: STAT  
SURNAME: MATTI B            OTHER NAME: F.O

INSTITUT ATTENDED: BIDA            YEAR OF GRADUATION: 1996

COURSE OPTION: STAT            YEAR OF ADMISSION: 1998

DIP GRADE: UC            PRE\_ND: -

SUB1: 6                            SUB2: 6                            SUB3: 3

SUB4: 4                            SUB5 0                            SUB6 0

————— COURSE: STAT —————

SUB1: ENGLISH                            SUB2: MATHEMATICS

SUB3: STATISTICS/ECONOMICS            SUB4: GEO/PHYSICS

SUB5: BIO/AGRIC                            SUB6: GOVT/FUR MATHS

————— PRESS F1 FOR HELP —————

enter any four (4) subjects for from the above ■

APPENDIX H

DATA DELETION ROUTINE

THE FEDERAL POLYTECHNIC, BIDA

DATA DELETION ROUTINE

DELETE

RECORD

FORM NO: 1008            REG NO: LA001            COURSE APPLIED: STAT

SURNAME: MATTI B            OTHER NAME: F.O

INSTITUT ATTENDED: BIDA            YEAR OF GRADUATION: 1996

COURSE OPTION: STAT            YEAR OF ADMISSION: 1998

DIP GRADE: UC            PRE\_ND: -

SUB1: 6                            SUB2: 6                            SUB3: 3

SUB4: 4                            SUB5 0                            SUB6 0

To DELETE this RECORD?(Y/N)

APPENDIX I

REPORT GENERATION ROUTINE

I.....	INTERMEDIATE REPORT
F.....	FINAL REPORT
P.....	PRINT FINAL REPORT
E.....	EXIT

enter option ■

```

ACCEPT TO PASWD
SET COLO TO W+
IF UPPER(PASWD) = "ATSUA"
  CLEA
  @ 2,2 TO 23,78
  @ 5,10 TO 13,70
  @ 19,10 TO 21,70
  SET COLO TO B+
  @ 7,11 SAY "
*****
*****
  @ 8,11 SAY "
** **
  @ 9,11 SAY "
*****
*****
  @ 10,11 SAY "
** **
  @ 11,11 SAY "
** **
*****"
SET COLO TO
@ 7,11 SAY "WELCOME TO"
@ 8,11 SAY "THE FEDERAL POLYTECHNIC"
@ 9,11 SAY "BIDA"
@ 10,11 SAY "NIGER STATE"
@ 11,11 SAY "NIGERIA"
@ 15,8 SAY " IF YOU HAVE COME TO PROCESS
ADMISSION"
@ 16,8 SAY " THEN YOU ARE IN THE RIGHT PLACE
...OK"
SET COLO TO R+
@ 20,26 SAY " Have a nice time"
SET COLO TO
@ 24,33 SAY " Press any key to continue"
WAIT
do admision
ELSE
  CLEA
  RES = " "
  @ 12,12 SAY "to try again (Y,N)" get RES
  read
  IF UPPER(RES) = "Y"
    CLEA
    LOOP
  ELSE
    CLEA
    EXIT
  ENDIF
ENDIF
NDDO

ONSOL ON
STATUS ON
CORE ON
RN

```

\*\*\*\*\* ADMISION PROG \*\*\*\*\*

```

SET TALK OFF
SET STAT OFF
SET ECHO OFF
SET SCORE OFF
SET ESCAPE OFF
DO WHILE .T.
SET COLO TO R+,G,Rb+
@ 2,10 SAY DATE()
@ 2,60 SAY TIME()
@ 3,9 TO 19,70 DOUBL
@ 5,25 SAY "THE FEDERAL POLYTECHNIC BIDA"
@ 6,25 SAY "COMPUTERIZED ADMISSION SYSTEM"
@ 7,25 SAY "PROGRAM MAINMENU"
@ 8,25 TO 8,39
@ 10,15 SAY "TASK CODE"                TASK
DESCRIPTION"
@ 11,15 TO 11,65
@ 12,15 SAY "A.....ADD
RECORD(S) "
@ 13,15 SAY "M.....MODIFY
RECORD(S) "
@ 14,15 SAY "D.....DELETE
RECORD(S) "
*@ 15,15 SAY "V.....VIEW
RECORD(S) "
@ 15,15 SAY "P.....PROCESS
REPORTS"
@ 16,15 SAY "G.....GENERATE
REPORTS"
@ 17,15 SAY "E.....EXIT"
TCODE = " "
@ 20,10 SAY "enter your choice" GET TCODE
READ
IF UPPER(TCODE) = " "
    LOOP
ELSE
    DO CASE
        CASE UPPER(TCODE) = "A"
            CLEA
            DO VAADD
        CASE UPPER(TCODE) = "M"
            CLEA
            DO VAMODI1
        CASE UPPER(TCODE) = "D"
            CLEA
            DO VADEL
        CASE UPPER(TCODE) = "G"
            CLEA
            DO GENERATE
        CASE UPPER(TCODE) = "P"
            CLEA
            DO VAMODI

```

```

OTHERWISE
  CLEA
  ANS = " "
  @ 12,12 SAY "TO EXIT (Y/N) ?" GET ANS
  READ
  IF UPPER(ANS) = "N"
    CLEA
    LOOP
  ELSE
    CLEA
    EXIT
  ENDIF
ENDCASE
ENDIF
ENDDO
SET TALK ON
SET ECHO ON
SET SCORE ON
SET STAT ON

```

\*\*\*\*\* VAADD PRG \*\*\*\*\*

```

SET TALK OFF
SET SCORE OFF
SET ECHO OFF
SET STATUS OFF
SET COLO TO RW/B+*
@ 12,12 SAY "you are about to make DATA ENTRY....OK"
SET COLO TO
@ 19,12 SAY "please wait....."
INK = INKEY(2)
CLEA
  A:USE ADMISION
MRNO = SPACE(8)
MFNO = SPACE(5)
MSNAME = SPACE(12)
MONAME = SPACE(5)
MINST = SPACE(10)
MPRE = SPACE(3)
MDGRAD = SPACE(4)
MCOURSE = SPACE(4)
MOPT = SPACE(4)
STORE 0 TO MYGRAD, MYADMIS, MSUB1, MSUB2, MSUB3, MSUB4, MSUB5,
MSUB6
CLEA
  T COLO TO RW+,RG+,G
  WHILE .T.
    MFNO = FORM_NO
    MRNO = REG_NO
    MSNAME = SURNAME
    MONAME = OTH_NAME
    MINST = INSTITUT
    MOPT = OPTION

```

```

MPRE = PRE_ND
MYGRAD = YR_GRAD
MYADMIS = YR_ADMIS
MDGRAD = DIP_GRAD
MSUB1 = SUB1
MSUB2 = SUB2
MSUB3 = SUB3
MSUB4 = SUB4
MSUB5 = SUB5
MSUB6 = SUB6
@ 0,2 SAY "DATE: "
@ 0,62 SAY "TIME: "
@ 0,8 SAY DATE()
@ 0,67 SAY TIME()
@ 1,2 TO 14,75 DOUBLE
@ 16,2 TO 20,75 PANEL           &&DOUBLE
SET COLO TO BR+
@ 4,25 SAY "THE FEDERAL POLYTECHNIC BIDA"
@ 5,25 SAY "DATA ENTRY ROUTINE"
@ 6,25 TO 6,42
@ 3,6 TO 7,14
@ 4,7 SAY "ADD"
@ 5,7 SAY "RECORDS"
@ 15,30 SAY "COURSE"
@ 12,6 SAY "SUBJECTS:"
@ 13,6 SAY "GRADE:"
@ 8,6 SAY "FORM NO" GET MFNO PICT "9999"
@ 8,23 SAY "REG.NO" GET MRNO
@ 8,50 SAY "COURSE APPLIED " GET MCOURSE
READ
@ 15,40 SAY MCOURSE
DO CASE
    CASE UPPER(MCOURSE) = "ACCT"
        SET COLO TO
        @ 17,10 SAY "SUB1 = ENGLISH           SUB2 =
MATHS/FURTHER MATHS"
        @ 18,10 SAY "SUB3 = ACCOUNTS         SUB4 =
ECONOMICS/PHYSICS"
        @ 19,10 SAY "SUB5 = BUS.METHODS/BIO/GEO  SUB6 =
GOVT/HIST/AGRIC"
        CASE UPPER(MCOURSE) = "STAT"
            SET COLO TO
            @ 17,10 SAY "SUB1 = ENGLISH           SUB2 =
MATHEMATICS"
            @ 18,10 SAY "SUB3 = STATISTICS/ECONS   SUB4 =
ECONOMICS/PHYSICS"
            @ 19,10 SAY "SUB5 = BIO/AGRIC         SUB6 =
GOVT/HIST/AGRIC"
            CASE UPPER(MCOURSE) = "ELEC"
                SET COLO TO
                @ 17,10 SAY "SUB1 = ENGLISH           SUB2 =
MATHEMATICS"
                @ 18,10 SAY "SUB3 = PHYSICS       SUB4 =
ECONOMICS/PHYSICS"
                @ 19,10 SAY "SUB5 = BIO/AGRIC         SUB6 =
GOVT/HIST/AGRIC"
                CASE UPPER(MCOURSE) = "ELEC"
                    SET COLO TO
                    @ 17,10 SAY "SUB1 = ENGLISH           SUB2 =
MATHEMATICS"
                    @ 18,10 SAY "SUB3 = PHYSICS       SUB4 =
ECONOMICS/PHYSICS"
                    @ 19,10 SAY "SUB5 = BIO/AGRIC         SUB6 =
GOVT/HIST/AGRIC"

```

```

        @ 19,10 SAY "SUB5 = GEO/FUR. MATHS          SUB6 =
BIOLOGY/ECONS"
        CASE UPPER(MCOURSE) = "QS"
        SET COLO TO
        @ 17,10 SAY "SUB1 = ENGLISH          SUB2 =
MATHEMATICS"
        @ 18,10 SAY "SUB3 = PHYSICS          SUB4 =
CHEMISTRY"
        @ 19,10 SAY "SUB5 = GEO/TECH.DRW/GOVT      SUB6 =
ECONS/FUR MATHS"
        ENDCASE
        @ 12,17 SAY "SUB1          SUB2          SUB3          SUB4          SUB5
SUB6"
        @ 21,2 SAY "enter any four (4) subjects from the above"
        @ 9,6 SAY "SURNAME:" GET MSNAME
        @ 9,33 SAY "OTHER-NAME:" GET MONAME
        @ 9,50 SAY "YEAR OF ADMISSION" GET MYADMIS PICTURE "9999"

        @ 10,6 SAY "INST.ATTENDED:" GET MINST
        @ 10,33 SAY "YR.OF GRAD:" GET MYGRAD PICTURE "9999"
        @ 10,50 SAY "COURSE OPTION:" GET MOPT
        *@ 11,6 SAY "YEAR OF ADMISSION:" GET MYADMIS PICTURE "9999"
        @ 11,33 SAY "DIPLOMA GRADE:" GET MDGRAD
        @ 11,60 SAY "PRE-ND:" GET MPRE
        @ 13,17 GET MSUB1 PICTURE "9"
        @ 13,26 GET MSUB2 PICTURE "9"
        @ 13,35 GET MSUB3 PICTURE "9"
        @ 13,43 GET MSUB4 PICTURE "9"
        @ 13,51 GET MSUB5 PICTURE "9"
        @ 13,59 GET MSUB6 PICTURE "9"
        READ
        @ 12,6 SAY "SUBJECTS"
        @ 13,6 SAY "GRADE: "
        SET COLO TO RB+*
        RESP = " "
        @ 23,10 SAY "are your entries correct (y/n)?" GET RESP
        READ
        IF UPPER(RESP) = "N"
            CLEA
            AN = " "
            @ 10,10 SAY "To Continue (Y/N)?" get AN
            READ
            IF UPPER(AN) = "Y"
                CLEA
                LOOP
            ELSE
                CLEA
                EXIT
        ENDIF
        IF
        UPPER(RESP) = "Y"
        PEND BLANK
        REPL FORM_NO WITH MFNO, REG_NO WITH MRNO, SURNAME WITH
        ME

```

```

    REPL OTH_NAME WITH MONAME, INSTITUT WITH MINST, DIP_GRAD
WITH MDGRAD
    REPL COURSE WITH MCOURSE, OPTION WITH MOPT, PRE_ND WITH
MPRE
    REPL YR_GRAD WITH MYGRAD, YR_ADMIS WITH MYADMIS, SUB1 WITH
MSUB1
    REPL SUB2 WITH MSUB2, SUB3 WITH MSUB3, SUB4 WITH MSUB4,
SUB5 WITH MSUB5
    REPL SUB6 WITH MSUB6
ENDIF
@ 21,1 CLEA TO 24,78
CHO = " "
@ 23,10 SAY "more records (y/n)?" GET CHO
READ
SET COLO TO
IF UPPER(CHO) = "Y"
    CLEA
    LOOP
ENDIF
IF UPPER(CHO) = "N"
    CLEA
    EXIT
ENDIF
ENDDO
CLEA
RETURN

```

\*\*\*\*\*VAMODI PRG\*\*\*\*\*

```

SET STATUS OFF
SET SCORE OFF
SET TALK OFF
SET ECHO OFF
I = 0
ON KEY LABEL F1 DO W2
DEFINE WINDOW W2 FROM 12,10 TO 16,70 DOUBLE
@ 10,10 TO 14,70
SET COLO TO G+*
@ 12,12 SAY "you are about to modify record(s) in the
base..ok"
@ 15,12 SAY "Please wait....."
I = INKEY(2)
SET COLO TO
CLEA
USE ADMISION
DO WHILE .T.
    SET COLO TO RW, G, Rg+
    RNO = " "
    @ 12,10 TO 16,70 PANEL COLO RW/B+
    @ 11,20 SAY "<enter CANDIDATE'S REGISTRATION NUMBER"
    @ 14,33 GET RNO
    READ
    CLEA
    USE ADMISION

```

```

LOCA FOR REG_NO = RNO
IF FOUND()
  SET COLO TO RG+
  @ 0,2 SAY "DATE:"
  @ 0,67 SAY "TIME:"
  @ 0,8 SAY DATE()
  @ 0,73 SAY TIME()
  SET COLO TO
  @ 1,2 TO 15,78 DOUBLE
  @ 16,2 TO 20,78 PANEL COLO RW/B+
  @ 20,30 SAY "press <F1> for help"
  @ 4,25 SAY "THE FEDERAL POLYTECHNIC BIDA"
  @ 5,25 SAY "DATA MODIFICATION ROUTINE"
  @ 6,25 TO 6,50
  @ 3,6 to 7,14
  @ 4,7 SAY "MODIFY"
  @ 5,7 SAY "RECORDS"
  @ 15,30 SAY "COURSE:"
  @ 8,6 SAY "FORM NO" GET FORM_NO
  @ 8,23 SAY "REG.NO" GET REG_NO
  @ 8,50 SAY "COURSE APPLIED" GET COURSE
  READ
  @ 15,40 SAY COURSE
  DO CASE
    CASE COURSE = "ACCT"
      @ 17,10 SAY "SUB1 = ENGLISH                SUB2 =
MATHS/FURTHER MATHS"
      @ 18,10 SAY "SUB3 = ACCOUNTS                SUB4 =
ECONOMICS/PHYSICS"
      @ 19,10 SAY "SUB5 = BUS.METHODS/BIO/GEO    SUB6 =
GOVT/HIST/AGRIC"
    CASE COURSE = "STAT"
      @ 17,10 SAY "SUB1 = ENGLISH                SUB2 =
MATHEMATICS"
      @ 18,10 SAY "SUB3 = STATISTICS/ECONOMICS    SUB4 =
GEO/PHYSICS"
      @ 19,10 SAY "SUB5 = BIO/AGRIC                SUB6 =
GOVT/FUR.MATHS"
    CASE COURSE = "ELEC"
      @ 17,10 SAY "SUB1 = ENGLISH                SUB2 =
MATHEMATICS"
      @ 18,10 SAY "SUB3 = PHYSICS                 SUB4 =
CHEMISTRY"
      @ 19,10 SAY "SUB5 = GEO/FUR.MATHS           SUB6 =
BIOLOGY/ECONS"
    CASE COURSE = "QS"
      @ 17,10 SAY "SUB1 = ENGLISH                SUB2 =
THEMATICS"
      @ 18,10 SAY "SUB3 = PHYSICS                 SUB4 =
MISTRY"
      @ 19,10 SAY "SUB5 = GEO/TECH.DRW/GOVT      SUB6 =
NS/FUR.MATHS"
  ENDCASE
  @ 21,2 SAY "enter any four (4) subjects from the above"

```

```

@ 9,6 SAY "SURNAME:" GET SURNAME
@ 9,40 SAY "OTHER-NAME:" GET OTH_NAME
@ 10,6 SAY "INST.ATTENDED:" GET INSTITUT
@ 10,40 SAY "YR.OF GRAD:" GET YR_GRAD
@ 11,6 SAY "COURSE OPTION:" GET OPTION
@ 11,40 SAY "YR OF ADMISSION:" GET YR_ADMIS
@ 12,6 SAY "DIP. GRADE:" GET DIP_GRAD
@ 12,40 SAY "PRE_ND:" GET PRE_ND
@ 13,6 SAY "SUB1:" GET SUB1
@ 13,30 SAY "SUB2:" GET SUB2
@ 13,54 SAY "SUB3:" GET SUB3
@ 14,6 SAY "SUB4:" GET SUB4
@ 14,30 SAY "SUB5:" GET SUB5
@ 14,54 SAY "SUB6:" GET SUB6
READ
@ 12,6 SAY "SUBJECTS:"
@ 13,6 SAY "GRADE:"
@ 21,1 CLEA TO 24,78
RESP = " "
@ 23,10 SAY "to effect CHANGE (y/n)?" GET RESP PICT "Y"
READ
@ 21,1 CLEA TO 24,78
REPL FORM_NO WITH FORM_NO, REG_NO WITH REG_NO
REPL SURNAME WITH SURNAME, OTH_NAME WITH OTH_NAME
REPL INSTITUT WITH INSTITUT, DIP_GRAD WITH DIP_GRAD
REPL COURSE WITH COURSE, OPTION WITH OPTION, PRE_ND WITH
PRE_ND
REPL YR_GRAD WITH YR_GRAD, SUB1 WITH SUB1, SUB2 WITH SUB2,
SUB3 WITH SUB3
REPL SUB4 WITH SUB4, SUB5 WITH SUB5, YR_ADMIS WITH YR_ADMIS,
SUB6 WITH SUB6
ANS = " "
@ 23,10 SAY "to modify another record (y/n)?" GET ANS PICT
"Y"
READ
IF UPPER(ANS) = "Y"
  CLEA
  LOOP
ELSE
  CLEA
  EXIT
ENDIF
ENDIF
IF .NOT. FOUND()
  CLEA
  @ 10,10 TO 14,70 PANEL COLO G+
  @ 15,10 SAY "you have entered " + RNO
  SET COLO TO R+*
  @ 12,20 SAY "this record does not EXIST"
  I = INKEY(1)
  CLEA
  DEC = " "
  @ 8,10 TO 12,70
  @ 10,20 SAY "to try another record (y/n)? " GET DEC

```

```

READ
IF UPPER(DEC) = "Y"
  CLEA
  LOOP
ENDIF
IF UPPER(DEC) = "N"
  CLEA
  EXIT
ENDIF
ENDIF
ENDDO
SET TALK ON
SET STAT ON
CLOSE DATABASES
CLOSE ALL
RETURN
*****PROCEDURE W2*****
PROCEDURE W2
ACTIVATE WINDOW W2
? " i.  press <CTRL+END> to save"
? " ii. use <ENTER> or the <ARROW> to move around the record"
wait
DEACTIVATE WINDOW W2
RETURN

```

\*\*\*\*\*VADEL PRG\*\*\*\*\*

```

SET TALK OFF
SET STATUS OFF
SET SCORE OFF
SET BELL OFF
CLEA
I = 0
@ 10,10 TO 14,70
SET COLO TO GR+*
@ 12,15 SAY "you are about to DELETE Record(s) in the
database...ok"
SET COLO TO
I = INKEY(3)
USE ADMISION
CLEA
DO WHILE .T.
  CLEA
  SET COLO TO RW+,r+,RG+
  REGNO = "      "
  @ 13,10 TO 16,70 PANEL
  11,20 SAY " <enter CANDIDATE'S REGISTRATION NUMBER>"
  14,33 GET REGNO
  AD
  EA
  CA FOR REG_NO = REGNO
  FOUND()
  4,3 SAY DATE()
  4,69 SAY TIME()

```

```

@ 5,2 TO 20,78 PANEL
@ 8,17 SAY "THE FEDERAL POLYTECHNIC BIDA"
@ 9,17 SAY "DATA DELETION ROUTINE"
@ 10,17 TO 10,37
@ 7,6 TO 10,14
@ 8,8 SAY "DELETE"
@ 9,8 SAY "RECORD"
@ 12,8 SAY "FORM-NO:" GET FORM_NO
@ 12,35 SAY "REG.NO:" GET REG_NO
@ 12,53 SAY "COURSE:" GET COURSE
@ 13,8 SAY "SURNAME:" GET SURNAME
@ 13,27 SAY "OTHER-NAME:" GET OTH_NAME
@ 13,50 SAY "INST.ATTENDED:" GET INSTITUT
@ 14,8 SAY "YR.OF GRAD:" GET YR_GRAD
@ 14,27 SAY "COURSE OPTION:" GET OPTION
@ 14,49 SAY "YEAR OF ADMISSION:" GET YR_ADMIS
@ 15,8 SAY "DIPLOMA GRADE:" GET DIP_GRAD
@ 15,40 SAY "PRE-ND:" GET PRE_ND
@ 16,8 SAY "SUB1:" GET SUB1
@ 16,29 SAY "SUB2:" GET SUB2
@ 16,45 SAY "SUB3:" GET SUB3
@ 16,60 SAY "SUB4:" GET SUB4
@ 17,8 SAY "SUB5:" GET SUB5
@ 17,29 SAY "SUB6:" GET SUB6
READ
ANS = "Y"
@ 20,15 SAY "are you sure you want to delete this record?
(y/n)" GET ANS
READ
SET COLO TO
IF UPPER(ANS) = "Y"
    DELETE
    PACK
    CLEA
    @ 12,12 SAY "the record has been deleted....ok"
    SET COLO TO
    I = INKEY(1)
    CLEA
ENDIF
DES = " "
@ 22,15 SAY "Delete another record (Y/N)?" GET DES
READ
IF UPPER(DES) = "Y"
    CLEA
    LOOP
ENDIF
IF UPPER(DES) = "N"
    CLEA
    EXIT
    IF
        CLEA
        @ 8,10 TO 12,70 DOUB
        @ 10,20 SAY "you have entered " + REGNO

```

```

    @ 14,10 SAY "This Record does not
exist.....ok"
    I = INKEY(2)
    CLEA
    @ 10,10 TO 14,70 DOUB
    RESPO = " "
    @ 12,20 SAY "to continue (y/n) ? " GET RESPO
    READ
    IF UPPER(RESPO) = "Y"
        CLEA
        LOOP
    ENDIF
    IF UPPER(RESPO) = "N"
        CLEA
        EXIT
    ENDIF
ENDIF
ENDDO
RETURN
*****VAVIEW PRG
set talk off
set stat off
set score off
set echo off
set colo to r,rg+,b+
@ 10,12 say "NOTE"
@ 11,12 to 11,16
@ 12,12 say " 1...you are viewing data (records) in the
database....ok"
@ 14,12 say " 2...you can add data into the base"
@ 16,12 say " 3...you can make modications as well"
@ 17,12 say "      by changing the contents in your database"
@ 19,10 to 19,70 doub
wait      "      press any key to continue
.....ok"
set colo to
clea
use admision
set colo to rw+,rg,r+
do while .not. eof()
    browse
    ans = "Y"
    @ 12,12 say "to continue (Y/N)" get ans
    read
    if upper(ans) = "Y"
        clea
        loop
    else
        clea
        exit
    endif
    talk on
    stat on

```

```
set echo on
set score on
return
```

```
*****VAPROCESS. PRG*****
```

```
SET STATUS OFF
SET SCORE OFF
SET TALK OFF
SET ECHO OFF
*ON KEY LABEL F1 DO W2
*DEFINE WINDOW W2 FROM 12,10 TO 16,70 DOUBLE
STORE SPACE(5) TO NC, MREMARKS
STORE 0 TO MYADMIS, MWEXP, MPOINTS, MYGRAD, MSUB1, MSUB2,
MSUB3, MSUB4, MSUB6
STORE 0 TO MPOINTS, MSUB1, MSUB2, MSUB3, MSUB4, MSUB5, MSUB6,
CR, PA
MREMARKS = SPACE(4)
SELECT 1
    USE ADMISION
SELECT 2
    USE ELIGIBLE
CLEA
SET COLO TO R+,G, RG+
@ 10,17 SAY "Processing Begins at "
@ 10,38 SAY TIME()
SELE 1
DO WHILE .NOT. EOF()
    SET COLO TO R+,G, RB
    SELE 1
        SET COLO TO RG+*
        @ 11,20 SAY "processing....."
        @ 12,20 SAY "    processing....."
        @ 13,20 SAY "        processing....."
    MFNO = FORM NO
    MRNO = REG NO
    MSNAME = SURNAME
    MONAME = OTH_NAME
    MINST = INSTITUT
    MCOURSE = COURSE
    MOPT = OPTION
    MPRE = PRE ND
    MDGRAD = DIP GRAD
    MYADMIS = YR ADMIS
    MYGRAD = YR GRAD
    MSUB1 = SUB1
    MSUB2 = SUB2
    MSUB3 = SUB3
    MSUB4 = SUB4
    MSUB5 = SUB5
    MSUB6 = SUB6
    MPOINTS = MPOINTS
    MREMARKS = MREMARKS
    NC = NC
    MYADMIS - MYGRAD
```

```

IF MDGRAD = "DIST"

    P1 = 4
ENDIF
IF MDGRAD = "UC"
    P1 = 3
ENDIF
IF MDGRAD = "LC"
    P1 = 2
ENDIF
IF MDGRAD = "PASS"
    P1 = 1
ENDIF
IF MPRE = "PRE"
    P2 = 1
ELSE
    P2 = 0
ENDIF
DO CASE
    CASE (MSUB1 > 0) .AND. (MSUB1 <= 3)
        P3 = 3
        C1 = 1
        STORE 0 TO C2, C3
    CASE (MSUB1 > 3) .AND. (MSUB1 <= 6)
        P3 = 2
        C2 = 1
        STORE 0 TO C1, C3
    CASE (MSUB1 > 6) .AND. (MSUB1 <= 8)
        P3 = 1
        C3 = 1
        STORE 0 TO C1, C2
    OTHERWISE
        P3 = 0
        STORE 0 TO C1, C2, C3
ENDCASE
DO CASE
    CASE (MSUB2 > 0) .AND. (MSUB2 <= 3)
        P4 = 3
    CASE (MSUB2 > 3) .AND. (MSUB2 <= 6)
        P4 = 2
    CASE (MSUB2 > 6) .AND. (MSUB2 <= 8)
        P4 = 1
    OTHERWISE
        P4 = 0
ENDCASE
DO CASE
    CASE (MSUB3 > 0) .AND. (MSUB3 <= 3)
        P5 = 3
    CASE (MSUB3 > 3) .AND. (MSUB3 <= 6)
        P5 = 2
    CASE (MSUB3 > 6) .AND. (MSUB3 <= 8)
        P5 = 1
    OTHERWISE
        P5 = 0

```

```

ENDCASE
DO CASE
    CASE (MSUB4 > 0) .AND. (MSUB4 <= 3)
        P6 = 3
    CASE (MSUB4 > 3) .AND. (MSUB4 <= 6)
        P6 = 2
    CASE (MSUB4 > 6) .AND. (MSUB4 <= 8)
        P6 = 1
    OTHERWISE
        P6 = 0

```

```

ENDCASE
DO CASE
    CASE (MSUB5 > 0) .AND. (MSUB5 <= 3)
        P7 = 3
    CASE (MSUB5 > 3) .AND. (MSUB5 <= 6)
        P7 = 2
    CASE (MSUB5 > 6) .AND. (MSUB5 <= 8)
        P7 = 1
    OTHERWISE
        P7 = 0

```

```

ENDCASE
DO CASE
    CASE (MSUB6 > 0) .AND. (MSUB6 <= 3)
        P8 = 3
    CASE (MSUB6 > 3) .AND. (MSUB6 <= 6)
        P8 = 2
    CASE (MSUB6 > 6) .AND. (MSUB6 <= 8)
        P8 = 1
    OTHERWISE
        P8 = 0

```

```

ENDCASE
DO CASE
    CASE (MSUB1 > 0) .AND. (MSUB1 <= 6)
        C1 = 1
        STORE 0 TO C2,C3
    CASE (MSUB1 > 6) .AND. (MSUB1 <= 8)
        C2 = 1
        STORE 0 TO C1,C3
    OTHERWISE
        STORE 0 TO C3,C1, C2

```

```

ENDCASE
DO CASE
    CASE (MSUB2 > 0) .AND. (MSUB2 <= 6)
        D1 = 1
        STORE 0 TO D2,D3
    CASE (MSUB2 > 6) .AND. (MSUB2 <= 8)
        D2 = 1
        STORE 0 TO D1
    OTHERWISE
        STORE 0 TO D3, D2,D1
    CASE
    CASE
    CASE (MSUB3 > 0) .AND. (MSUB3 <= 6)

```

```

    E1 = 1
    E2 = 0
CASE (MSUB3 > 6) .AND. (MSUB3 <= 8)

    E2 = 1
    E1 = 0
    OTHERWISE
        STORE 0 TO E3, E2, E1
ENDCASE
DO CASE
    CASE (MSUB4 > 0) .AND. (MSUB4 <= 6)
        F1 = 1
        F2 = 0
    CASE (MSUB4 > 6) .AND. (MSUB4 <= 8)
        F2 = 1
        F1 = 0
    OTHERWISE
        STORE 0 TO F3, F1, F2
ENDCASE
DO CASE
    CASE (MSUB5 > 0) .AND. (MSUB5 <= 6)
        G1 = 1
        G2 = 0
    CASE (MSUB5 > 6) .AND. (MSUB5 <= 8)
        G2 = 1
        G1 = 0
    OTHERWISE
        STORE 0 TO G3, G2, G1
ENDCASE
DO CASE
    CASE (MSUB6 > 0) .AND. (MSUB6 <= 6)
        H1 = 1
        H2 = 0
    CASE (MSUB6 > 6) .AND. (MSUB6 <= 8)
        H2 = 1
        H1 = 0
    OTHERWISE
        STORE 0 TO H3, H2, H1
ENDCASE
CR = C1 + D1 + E1 + F1 + G1 + H1
PA = C2 + E2 + F2 + G2 + H2 + D2
DO CASE
    CASE CR = 4
        NC = "4C,0P"
ENDCASE
DO CASE
    CASE CR = 3
        IF (PA = 1)
            NC = "3C,1P"
        ELSE
            NC = "3C,0P"
        ENDIF
ENDCASE
CASE

```

```

CASE CR = 2
  IF (PA = 2)
    NC = "2C,2P"
  ENDIF

  IF (PA = 1)
    NC = "2C,1P"
  ENDIF
  IF (PA = 0)
    NC = "2C,0P"
  ENDIF
ENDCASE
DO CASE
  CASE CR = 1
    IF (PA = 3)
      NC = "1C,3P"
    ENDIF
    IF (PA = 2)
      NC = "1C,2P"
    ENDIF
    IF (PA = 1)
      NC = "1C,1P"
    ENDIF
    IF (PA = 0)
      NC = "1C,0P"
    ENDIF
  ENDCASE
DO CASE
  CASE CR = 0
    IF (PA = 4)
      NC = "0C,4P"
    ENDIF
    IF (PA = 3)
      NC = "0C,3P"
    ENDIF
    IF (PA = 2)
      NC = "0C,2P"
    ENDIF
    IF (PA = 1)
      NC = "0C,1P"
    ENDIF
    IF (PA = 0)
      NC = "0C,0P"
    ENDIF
  ENDCASE
DO CASE
  CASE MDGRAD = "PASS"
    IF MWEXP >= 2
      P9 = 1
    ELSE
      P9 = 0
    ENDIF
  CASE MDGRAD = "DIST"
    IF MWEXP >= 1

```

```

        P9 = 1
    ELSE
        P9 = 0
    ENDIF
CASE MDGRAD = "UC"

    IF MWEXP >= 1
        P9 = 1
    ELSE
        P9 = 0
    ENDIF
CASE MDGRAD = "LC"
    IF MWEXP >= 1
        P9 = 1
    ELSE
        P9 = 0
    ENDIF
OTHERWISE
    P9 = 0
ENDCASE
MPOINTS = P1 + P2 + P3 + P4 + P5 + P6 + P7 + P8 + P9
DO CASE
CASE MDGRAD <> "PASS"
    IF MWEXP >= 1
        DO CASE
            CASE MPOINTS >= 8
                IF (MSUB1 = 0) .OR. (MSUB2 = 0)
                    IF MPRE = "PRE"
                        MREMARKS = "Q*"
                    ELSE
                        MREMARKS = "NQ**"
                    ENDIF
                ELSE
                    MREMARKS = "Q"
                ENDIF
            CASE MPOINTS < 8
                MREMARKS = "NQ"
            ENDCASE
        ELSE
            MREMARKS = "NQ*"
        ENDIF
CASE MDGRAD = "PASS"
    IF MWEXP >= 2
        DO CASE
            CASE MPOINTS >= 8
                IF (MSUB1 = 0) .OR. (MSUB2 = 0)
                    IF MPRE = "PRE"
                        MREMARKS = "Q*"
                    ELSE
                        MREMARKS = "NQ**"
                    ENDIF
                ELSE
                    MREMARKS = "Q"
                ENDIF
            ENDCASE

```

```

        CASE MPOINTS < 8
            MREMARKS = "NQ"
        ENDCASE
    ELSE
        MREMARKS = "NQ*"
    ENDIF

```

```

ENDCASE
SELE 2
    APPEND BLANK
    REPL FORM_NO WITH MFNO, REG_NO WITH MRNO
    REPL SURNAME WITH MSNAME, OTH_NAME WITH MONAME, NO_CR WITH
NC
    REPL INSTITUT WITH MINST, DIP_GRAD WITH MDGRAD
    REPL COURSE WITH MCOURSE, OPTION WITH MOPT, PRE_ND WITH MPRE
    REPL YR_GRAD WITH MYGRAD, SUB1 WITH MSUB1, SUB2 WITH MSUB2
    REPL SUB3 WITH MSUB3, SUB4 WITH MSUB4, SUB5 WITH MSUB5
    REPL SUB6 WITH MSUB6, POINTS WITH MPOINTS, REMARKS WITH
MREMARKS
SET COLO TO
SELE 1
SKIP
IF EOF()
    SET COLO TO RG+
    @ 11,17 CLEA TO 13,70
    @ 13,17 SAY "processing ends at"
    @ 13,37 SAY TIME()
    @ 15,17 SAY "press any key to continue....."
    WAIT " "
ENDIF
ENDDO
SET STAT ON
CLOSE DATABASES
CLOSE ALL
RETURN
*****GENERATE. PRG*****
SET TALK OFF
SET SCORE OFF
SET STAT OFF
SET ECHO OFF
DO WHILE .T.
    SET COLO TO Rw+,G,gR+
    @ 10,26 SAY "GENERATING REPORT SUBMENU"
    @ 11,10 TO 16,70 DOUB
    @ 12,11 SAY "I..... .GENERATE
INTERMEDIATE REPORT"
    @ 13,11 SAY
.....GENERATE FINAL REPORT"
    @ 14,11 SAY
.....PRINT FINAL REPORT"
    @ 15,11 SAY
.....EXIT"
    OPTI = " "
    @ 17, 15 SAY "enter option" get opti

```

```

READ
IF UPPER(OPTI) = "I"
  CLEA
  DO REPOTR1
ENDIF
IF UPPER(OPTI) = "F"
  CLEA

  DO FREPORT
ENDIF
IF UPPER(OPTI) = "P"
  CLEA
  DO REPOTR2
ENDIF
IF UPPER(OPTI) = "E"
  CLEA
  EXIT
ENDIF
ENDDO
SET TALK OFF
SET STAT OFF
RETU

```

\*\*\*\*\*FREPORT\*\*\*\*\*

```

SET TALK OFF
SET STAT OFF
SET SCORE OFF
SET ECHO OFF
CLEA
MRNO = SPACE(8)
MSNAME = SPACE(15)
STORE SPACE(4) TO MONAME, MCOURSE, MREMARKS
MPOINT = 0
SELE 1
  USE ADMISION
SELE 2
  USE ELIGIBLE
SELE 3
  USE AWARD
K = 1
I = 0
SET COLO TO RW/B+*
@ 14,15 SAY "you are about to generate REPORT on successful
APPLICANTS"
16,15 SAY "Please wait...."
= INKEY(2)
A
WHILE .T.
A
COLO TO RW/B+
= " "
2,10 TO 14,70 PANEL
1,25 SAY "<enter REGISTRATION NUMBER>"
3,32 GET MRNO

```

```

READ
SELE 2
*USE ELIGIBLE
LOCATE FOR REG_NO = MRNO
IF FOUND()
  CLEA
  @ 5,10 TO 15,70 DOUBLE

  SET COLO TO R+
  @ 16,12 TO 18,68 PANEL
  @ 4,10 SAY DATE()
  @ 4,63 SAY TIME()
  SET COLO TO
  SET COLO TO G+
  @ 6,12 SAY "THE FEDERAL POLYTECHNIC BIDA"
  @ 7,12 SAY "ROUTINE FOR GENERATING FINAL ADMISSION INTO HND
PROGRAMS"
  @ 8,12 SAY REPLICATE ("_", 57)
  SET COLO TO R+
  @ 17,18 SAY "Press <CTRL+END> to SAVE, <ESC> to ABORT"
  *@ 9,20 SAY "SERIAL NUMBER: " GET S_NO
  @ 10,20 SAY "REGISTRATION NUMBER: " GET REG_NO
  @ 11,20 SAY "SURNAME: " GET SURNAME
  @ 12,20 SAY "OTHER NAMES: " GET OTH_NAME
  @ 13,20 SAY "COURSE APPLIED FOR: " GET COURSE
  @ 14,20 SAY "POINTS SCORED: " GET POINTS
  READ
  RESP = " "
  SET COLO TO RG+
  @ 19,10 SAY "Is the candidate selected (y/n)?" GET RESP
  READ
  IF UPPER(RESP) = "N"
    CLEA
    LOOP
  ENDIF
  IF UPPER(RESP) = "Y"
    MRNO = REG_NO
    MSNAME = SURNAME
    MONAME = OTH_NAME
    MCOURSE = COURSE
    MPOINTS = POINTS
    SELE 3
    USE AWARD
    APPEND BLANK
    REPL REG_NO WITH MRNO, SURNAME WITH MSNAME
    REPL OTH_NAME WITH MONAME, COURSE WITH MCOURSE, POINTS
    WITH MPOINTS
  ENDIF
  DECI = " "
  @ 20,15 SAY "More records (Y/N)?" GET DECI
  READ
  IF UPPER(DECI) = "Y"
    SELE 2
    CLEA

```

```

        LOOP
    ENDIF
    IF UPPER(DECI) = "N"
        CLEA
        EXIT
    ENDIF
ELSE
    CLEA

    RES = " "
    @ 10,10 TO 12,70 PANEL
    SET COLO TO G+
    @ 11,20 SAY "no such record please"
    I = INKEY(2)
    CLEA
    @ 10,10 TO 12,70 PANEL
    @ 11,20 SAY "to continue (y/n) ?" GET RES
    READ
    IF UPPER(RES) = "Y"
        CLEA
        LOOP
    ENDIF
    IF UPPER(RES) = "N"
        CLEA
        EXIT
    ENDIF
ENDIF
ENDDO
CLOSE DATABASES
CLOSE ALL
RETURN

```

\*\*\*\*\*REPORT1\*\*\*\*\*

```

SET TALK OFF
SET SCORE OFF
SET STATUS OFF
*SET DEVI TO SCREEN
CLEA
SS = SPACE(7)
STORE SPACE(4) TO MSNO
STORE SPACE(10) TO MINST, MRNO
MSNAME = SPACE(15)
MONAME = SPACE(5)
STORE SPACE(4) TO MDGRAD, MCOURSE, MREMARKS, T
STORE 0 TO MYGRAD, MYADMIS
STORE SPACE(3) TO MPRE
STORE SPACE(2) TO MPASS, MCREDIT, MNCR
MPOINTS = 0
MYGRAD = 0
STORE 0 TO MSUB1, MSUB2, MSUB3, MSUB4, MSUB5, MSUB6, RE
@ 12,12 SAY "<ENTER SESSION>" GET SS
READ
USE ELIGIBLE
INDEX ON UPPER(COURSE) + " " + UPPER(REG_NO) TO ADMIS

```

```

SNO = 0
K = 1
R = 7
CLEA
*SET DEVICE TO PRINT
@ 1,15 SAY "THE FEDERAL POLYTECHNIC BIDA."
@ 2,15 SAY "List of Shortlisted Candidates For admission into
HND"
@ 3,15 SAY "program For the " +ss + " Session."

@ 4,1 to 4,78 double
DO WHILE .NOT. EOF()
*SET DEVICE TO PRINT
*PRINTJOB
SNO = SNO + 1
@ 5,1 SAY "S/NO"
@ 5,6 SAY "REG/NO"
@ 5,17 SAY "CANDIDATE  NAME"
@ 5,34 SAY "CSE"
@ 5,39 SAY "INSTITUT"
@ 5,50 SAY "YEAR"
@ 5,55 SAY "DIP"
@ 5,59 SAY "O-L"
@ 5,65 SAY "EN"
@ 5,68 SAY "MA"
*@ 5,71 SAY "PRE"
@ 5,71 SAY "PTS"
@ 5,74 SAY " REMKS"
@ 6,1 TO 6,78 DOUBLE
MSNAME = SURNAME
MONAME = OTH_NAME
MDGRAD = DIP_GRAD
MYGRAD = YR_GRAD
MCOURSE = COURSE
MINST = INSTITUT
MPOINTS = POINTS
MREMARKS = REMARKS
MPRE = PRE_ND
MSUB1 = SUB1
MSUB2 = SUB2
MRNO = REG_NO
MNCR = NO_CR
@ R,1 SAY STR(SNO,2)
@ R,5 SAY MRNO
@ R,16 SAY MSNAME
@ R,28 SAY MONAME
@ R,34 SAY MCOURSE
@ R,39 SAY MINST
@ R,49 SAY STR(MYGRAD,4)
@ R,54 SAY MDGRAD
@ R,59 SAY MNCR
*@ R,62 SAY MPRE
@ R,65 SAY STR(MSUB1,1)
@ R,68 SAY STR(MSUB2,1)

```

```

@ R,71 SAY STR(MPOINTS,2)
@ R,75 SAY MREMARKS
R = R + 1
K = K + 1
  IF K >= 11
    WAIT
    @ 7,1 CLEA TO 7,78
    R = 7
  ENDDIF
*SET DEVI TO PRINT

```

```

SKIP
*SET DEVI TO PRIN
*ENDPRINT
ENDDO
SET TALK ON
SET SCORE ON
SET STAT ON
CLOSE DATABASES
CLOSE ALL
RETURN

```

\*\*\*\*\*REPORT2\*\*\*\*\*

```

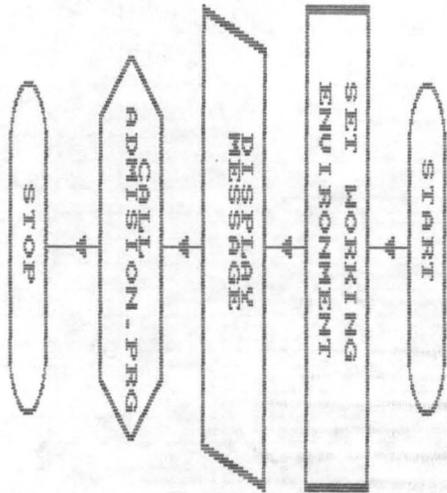
SET TALK OFF
SET SCORE OFF
SET STAT OFF
SS = SPACE(7)
SNO = 0
KOUNT = 0
STORE SPACE(4) TO MONAME, MOURSE, MREMARKS, MPOINTS, MSNO
MSNAME = SPACE(15)
MRNO = SPACE(10)
@ 12,12 SAY "ENTER SESSION" GET SS
READ
R = 7
SET DEVI TO SCREEN
USE AWARD
INDEX ON UPPER(COURSE)+" "+UPPER(REG_NO) TO ELIGIBLE
CLEA
DO WHILE .NOT. EOF()
  SET COLO TO R+G+,R+
  SNO = SNO + 1
  @ 1,13 SAY "THE FEDERAL POLYTECHNIC BIDA"
  @ 2,13 SAY "LIST OF CANDIDATES OFFERED ADMISSION INTO HND
PROGRAM"
  @ 3,13 SAY "FOR THE "+SS+" SESSION"
  @ 4,1 TO 4,78 DOUBLE
  @ 5,1 SAY "S/NO"
  @ 5,16 SAY "REG/NO"
  @ 5,32 SAY "CANDIDATE      NAME"
  @ 5,55 SAY "COURSE"
  @ 5,65 SAY "POINTS"
  @ 6,1 TO 6,78 DOUBLE
  SET COLO TO R+G+
  MSNO = S_NO

```

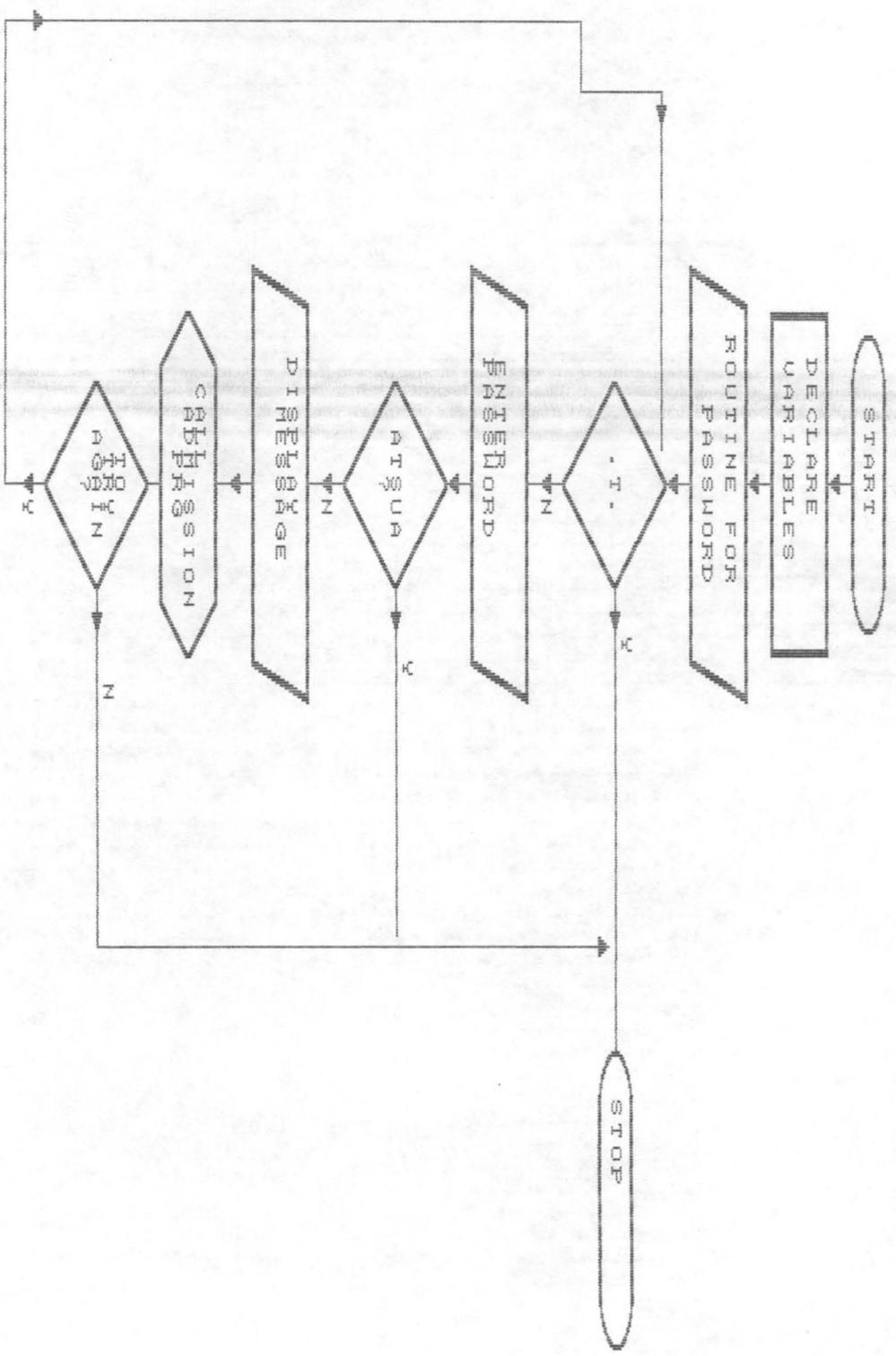
```
MRNO = REG_NO
MSNAME = SURNAME
MONAME = OTH_NAME
MCOURSE = COURSE
MPOINTS = POINTS
@ R,1 SAY STR(SNO,4)
@ R,16 SAY MRNO
@ R,32 SAY MSNAME
@ R,45 SAY MONAME
@ R,55 SAY MCOURSE
@ R,65 SAY STR(MPOINTS,2)
```

```
IF KOUNT >= 15
  WAIT
  @ 7,1 CLEA TO 24,78
  KOUNT = 0
  R = 7
ENDIF
R = R + 1
KOUNT = KOUNT + 1
SKIP
ENDDO
CLOSE DATABASES
CLOSE ALL
RETURN
```

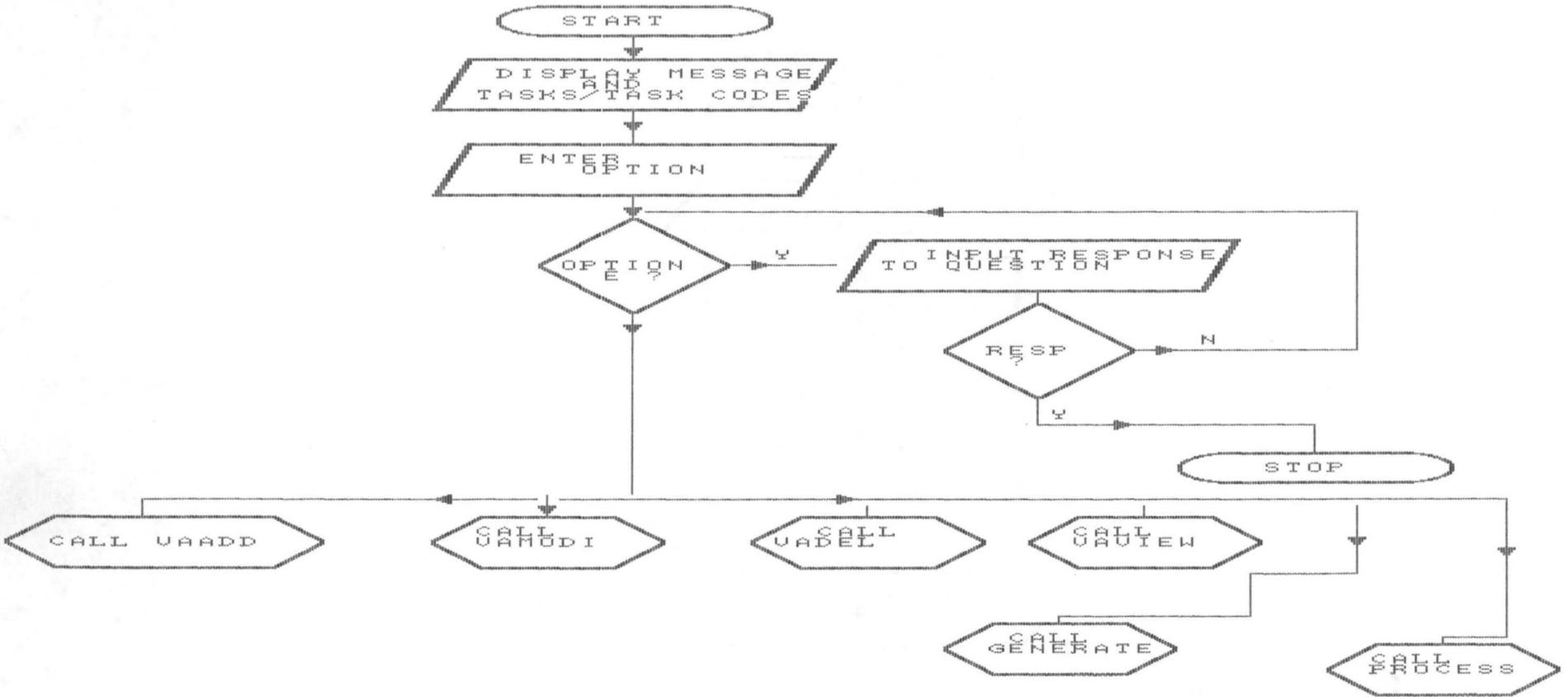
PROGRAM FLOWCHART



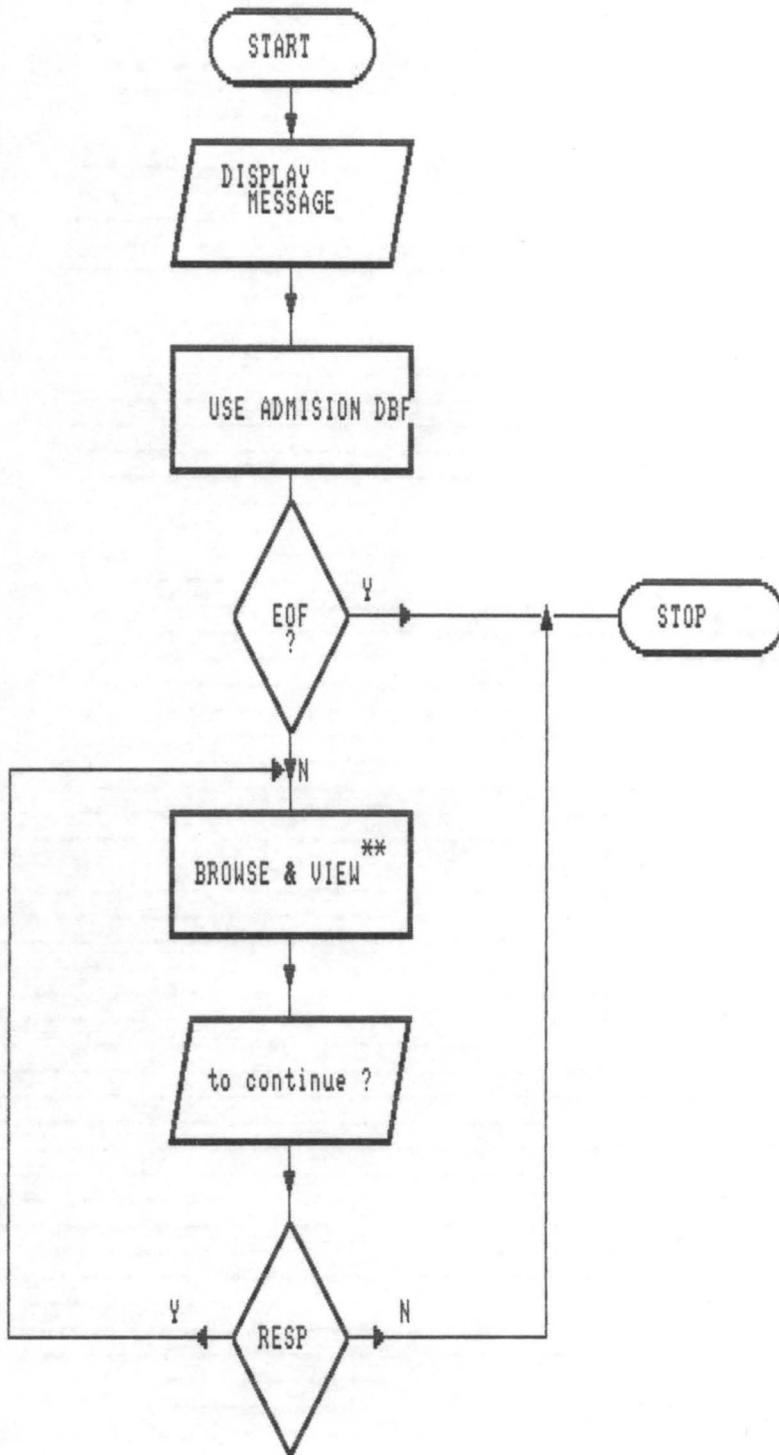
AUPASMD.PRG



ADMISSION PROGRAM

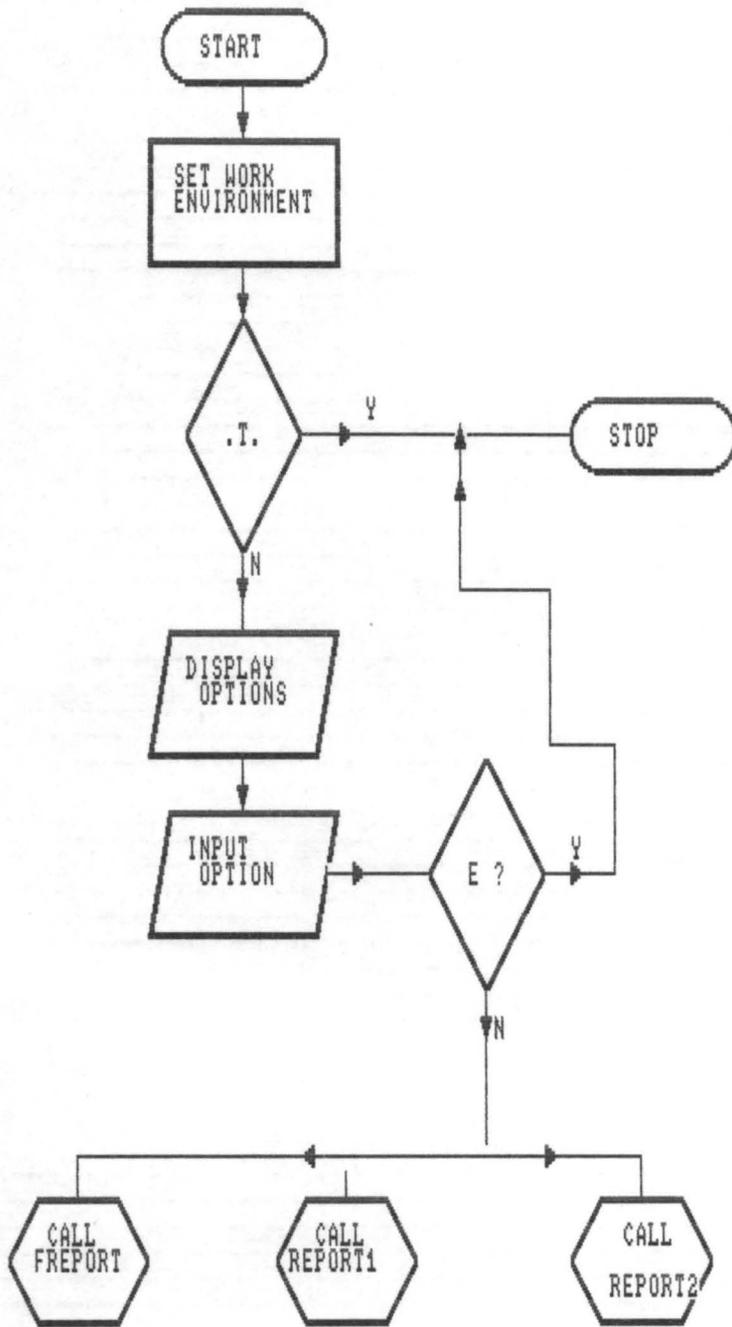


UAVIEW PROGRAM

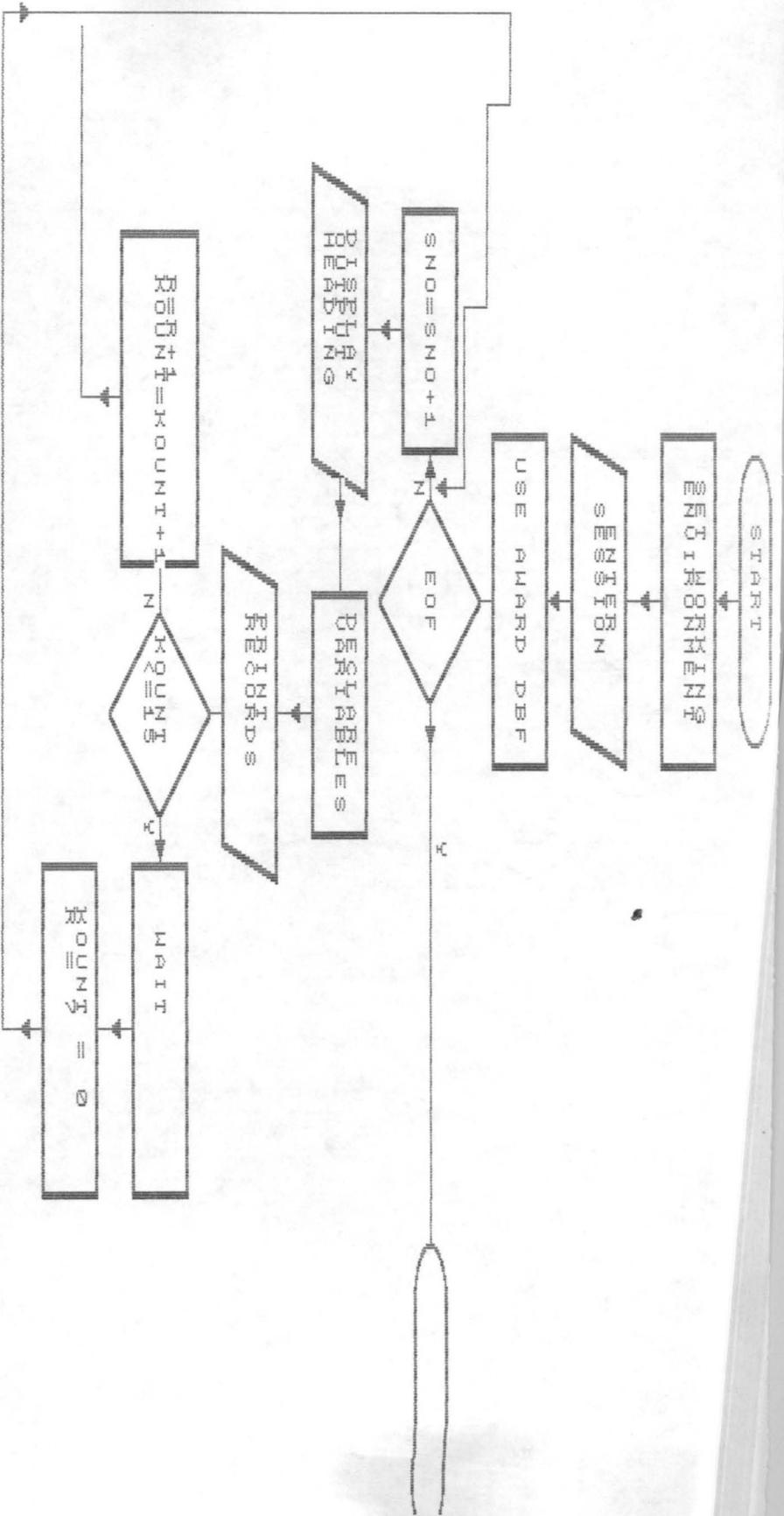


**NOTE: \*\*** Indicates that other activities can be performed here  
For example, we can make data entry, deletion, modification etc.

GENERATE PROGRAM







PROCESS FLOWCHART

