COMPUTERIZATION OF RETIREMENT

PROCEDURE IN FEDERAL PUBLIC SERVICE

(A CASE STUDY OF FEDERAL MINISTRY OF ENVIRONMENT, ABUJA)

BY

OJO OLUGBENGA AUGUSTUS

PGD/MCS/2000/1023

DEPARTMENT OF MATHEMATICS/COMPUTER SCIENCE

FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA

NOVEMBER 2003

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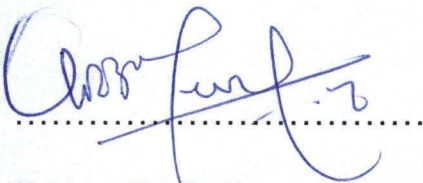

BY

OJO OLUGBENGA AUGUSTUS

PGD/MCS/2000/1023

A PROJECT SUBMITTED TO THE DEPARTMENT OF

MATHEMATICS/COMPUTER SCIENCE

FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA

IN PARTIAL FULFILMENT OF THE REQUIREMENT FOR THE AWARD OF
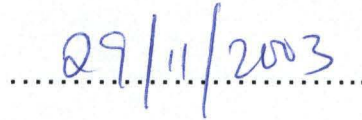
THE POST GRADUATE DIPLOMA IN COMPUTER SCIENCE.

NOVEMBER 2003

CERTIFICATION

I certify that this project entitled "Computerization of Retirement Procedure in Federal Public Service: A case study of Federal Ministry of Environment, Abuja, meets the regulation governing the award of post graduate Diploma in Computer Science of Federal University of Technology, Minna, Niger state

....29/11/2003....
Prince R. Badmus   Date
Project Supervisor

....
Mr. L. N. Ezeako   Date
(Head of Department)

....
External Examiner   Date

DEDICATION

This project is dedicated to the Almighty God, the giver of life to all creatures. And to my late father, Mr. Lawrence Ladeji Ojo. May your soul rest in perfect peace. Amen.

ACKNOWLEDGEMENT

I give all glory to God Almighty for seeing me through the completion of this programme successfully. I thank Him for his protection and provision for me, and my family throughout the period of this course. Thank you Lord.

My sincere gratitude goes to my supervisor prince R.O. Badmus who gave me both academic and moral support during the period of production of this project work. Thank you sir.

I am also indebted to Mr. L..N. Ezeako the Head Mathematics and Computer department, Mallam Audu Isah the PGD part-time course coordinator, all other lecturers, the entire staff and all members of Mathematics and Computer science department.

Also my heartfelt gratitude goes to my wonderful wife whos love, understanding and endurance can not be quantify, I say more grease to your elbow.

I appreciate the understanding of my children Olusola, Oluwagbayi and Oluwagbayin; may God bless you with all wisdom, knowledge and understanding.

At this junction, I wish to single out my uncle in-law Engr. Z.O. Ajani who throughout the program gave us the parental support and for

being there for us always, may God almighty continue to bless you and your family.

I wish to also thank Engr. O.K. Okunnu & family, who at various times place joy and happiness at my disposal at all time. So also I wish to acknowledge the assistance rendered by Mr. Anthony Itesumah, Mr. & Mrs. Ajibowo, Engr. & Mrs. Suulola and more importantly the encouragement and support given by my Mother, my Parents in-law, my brothers & sister and my brother in-law & sister in-law will linger in my memory forever.

Also I appreciate the support of my friends and course mates, such as Adedokun Rafiu, Mr. & Mrs. Paul Abiade, Mr. & Mrs. Fajimi, Mr. Bibilari, Mr. & Mrs. Alex Adebayo and host of others, numerous to mention names. God bless you all. You are really a friend in need and a friend indeed.

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ABSTRACT

Considering the popular saying that says "For every thing that has beginning must have an end" This is applicable to appointment and retirement in Federal Public Service.

This project is focusing on computerization of retirement procedure in Federal Public Service vis-à-vis compulsory retirement age for all grades of staff in the public service that is, 60years of age or 35years in service whichever is applicable.

It is in light of the above, an effective, dependable, reliable and efficient system is desirable. The computerization of retirement procedure in Federal Public Service for any of the Federal Ministries, Parastatals and Extra-Ministerial Agencies will enable the maximization of her human resources, effective usage and a fast and reliable information management system.

This project discussed the standard given by Public Services Rules in respect of retirement and the existing implementation based on the manual procedures. The computerization system is then designed and implemented based on the same manual procedures. This age and time call for the implementation of such a system that is desirable and the relevance of the computerization has since been long overdue.

CHAPTER ONE

INTRODCTIION

1.1   Background of the study

All Federal Ministries, parastatals and extra – Ministerial Agencies have their various departments of personnel which carries out all their human resource management. Thus, management is defined as the Organization and direction of persons in order to accomplish a specific end. This process requires planning, Organization, directing, Coordinating, controlling and monitoring of human resources within the organization in question.

Hence, the public service is the service that ranks as such for the purpose of the pensions Act (Cap. 346) has her management procedure of human resources Appointment and retirement process.

As it is with all governmental agencies, a lot of bureaucracy is involved in processing. Documentations are done on paper, file and stored in the registry of the Ministry.

This approach of records is not only archaic but also prone to errors and accidents such as soiling of records, lost of information, lost of papers e.t.c. Space for storing data is also large; usually a big room. Moreover, the need to physically go through the rack of files when

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searching for a record or the whole registry, or visiting all departments where the retirees in question has worked before when doing a periodical update. All these constitute a great problem, it consumes time, energy and money.

1.2 Objective of the study

The objective of this study is to develop an application program using a current object oriented programming tool to proffer solutions to associated problems related to the manual procedure of Retirement of Federal Public Servant. This project work established a computerized procedure that is easy and convenient to manipulate using date of birth and date of first Appointment as input in order to generate Retirement Status of all Public Servants. However, it is a more effective and accurate source of information for decision –making.

1.3 Methodology

The approach of this project was based on the following strategies:

i.   Studying the existing system and procedures.

ii. Identifying areas requiring improvement and modification for computation and generation of reports.

iii. Develop on underlying system to timely management information system requirement in various areas.

iv.   The new system is to achieve some set goals that have not been embarked upon before in the organization under the present manual system.

1.4 PROBLEM DEFINITION

Retirement being the act or event of retiring or state of having retired from work (Public Service) was designed with the backdrop that effective management of human resources with the hope of leaving the service at a stipulated time. This plays an important role in determining the efficiency and level of output of workers while in service. It is in line with this premise that a manual procedure that is slow to give correct and accurate data when needed is reviewed and proffers solution for implementation. The Retirement procedure is thus more accurate, reliable, dependable and timely. It is a source of detecting workers that are due for retirement in any organization when it is systematically adopted.

1.5 DEFINITION OF TERMS

1. APPOINTMENT: - the act of appointing a person to a job or selecting somebody for a position of responsibility.

2. RETIREMENT: - The event of retiring, state of having retired from work or the period of one's life after one has retired.

3. COMPUTER: - is an electronic device for storing and analyzing information fed into it, for calculating or for controlling machinery automatically.

4. COMPUTERIZATION: - Is the act of providing a computer to do the work of or for somebody e.g. data processing, word processing e.t.c; and store information in the computer or any other storage devices with the aim of retaining it for retrival whenever, the information is needed.

5. PROCESSING: - is an adjective, describing a series of actions or tasks performed in order to do, make or achieve a particular purpose.

6. PROCEDURE: - is a series of actions that need to be completed in order to achieve a particular purpose.

7. FEDERAL: - It is a adjective, describing a system of government in which several states unites but keep considerable control over their own internal affairs.

8. PUBLIC: - People in general or a group of people who share a particular interest or who have something in common.

9. SERVICE: - Work done or duties performed for a government, company e.t.c.; or a department of people employed by the government or a public organization.

10. ENVIRONMENT: - The conditions, circumstances e.t.c. affecting a person's life.

11. MANUAL: - A book containing information or practical instructions on a given subject.

12. RESOURCE(S): - A supply of something that a country, an organization or an individual has and can use especially to increase weather of a thing that gives help, support or comfort when needed or the ability to find quick, clever and efficient ways of doing things.

13. HUMAN: - Is an adjective of or characteristics of people, constrasted with God, animal or machines or the human as a noun means human being.

1.6 SCOPE AND LIMITATION OF STUDY

The scope of this project work covers the Retirement Procedure in Federal Public Service. Since similar methods are used in all Ministries, Parastatals and Extra-Ministerial Agencies in determining Retirement

status of their staff; therefore, the procedure is designed for use by any of the Federal Public Service.

Limitations: -

Constraint associated with the system is that it might not work very well with organizations that do not strictly follow the public service rules. Also, it can not work for Public Servant that voluntarily retired or resigned their appointments and those that their appointments were terminated.

Other factors that affect this study are:

- Time constraint: Due to limited time for the completion of this study it makes the time insufficient for the study.

- Personnel: - Inadequate personnel made the material gathering for this study cumbersome.

- Financial constraint: - The unavailability of adequate finances pose a serious difficulty in the completion of this study due to a lot of traveling involved for material gathering as well as consultation with my supervisor.

- Materials: - Due to the fact that this is the first time a study is being carried out on the topic of this study therefore, there are no reference books and projects for much assistance.

CHAPTER TWO

HISTORICAL REVIEW

2.1 HISTORICAL STUDY OF RETIREMENT PROCEDURE

Civil service is a name generally given to the paid nonmilitary service in non-elective office in the executive branch of government. Though the term does not apply properly to service in the legislative and judicial branches, since some employees of the later two branches are subject to provision of the civil service Act.

Thus, the historical background of the public service rule number 02809 was given by the provisions of Circular Ref: No B63216/S.I/X of 20th August, 1999, the Federal Government approved the restoration of the 35years rule as a condition for retirement with effect from 1st September, 1999. Accordingly, every officer who attained the age of 60years or 35years of pensionable service, whichever comes earlier was asked to retire. The rule now requires every officer to give six months notice prior to the effective data of his retirement to ensure that his entitlements are paid to him as he leaves the service. When can officer for whatever reason, stays in service beyond the date he/she is expected to retire, all emoluments earned by him/her therefore shall be deducted from his/her retirement benefits and he/she shall in addition face other

severe disciplinary actions. Hence there must be a unique procedure in place that will automatically reveal when an officer is due for retirement.

2.2 OVERVIEW OF MANUAL PROCESSING

The Federal Civil Service Commission and the Federal Office of Establishment are the two constitutional bodies set up to keep records of public servants in specific areas such as appointment, promotion, discipline transfer, retirement e.t.c. Therefore, all the records pertaining to every officer is being kept by these offices.

However, every officer is expected to keep his./her record of service in preparation for retirement so that he/she will be able to notify the office of head of service and give six months notice prior to when the officer is due to proceed on retirement (35years in service or 60ysears of age), after which the office of the Head of service will notify the Federal Civil Service Commission and Federal Office of Establishment and later confirm from records if the officer in question is due for retirement. Thereafter the records of the officer will be sent to pension and gratuity department in the Head of service office for the preparation of the officer's retirement benefits in order to ensure that the entitlement are paid to the officer as he leaves the service.

2.3 SHORTCOMINGS OF THE MANUAL PROCESSING

There are many shortcomings generated by manual processing, these include:

- Data update are not done when event necessitate it such as willful retirement, dearth, retirement, sack e.t.c. Therefore, it make officer's records incomplete

- Unnecessary duplication of records.

- Database enquires cannot be easily processed

- Inability to use search criteria

- Limitations in the generation of reports

- No definite method of tracking changes

- Susceptibility of records to natural and malicious disaster

- Undue disciplinary action of officers who ignorantly stay beyond the expected period for retirement.

2.4 BENEFITS OF COMPUTERIZATION

A computerized retirement procedure will offer the following advantages to the Federal Public Services: -

- Automatic data update by the system

- Finding specific records with little effort by the use of search criteria.

- Access to short information in many different ways

- Generation of multiple report from databases

- Avoidance of unnecessary duplication of records

- More efficient management of stored information

- Protection of database from authorized access

- Regular back-up of data files

- Data security through the use of password and privilege to store data.

2.5   HUMAN RESOURCES REQUIREMENT

It should be noted here that just as the project work is focused on computerization of retirement procedure in Federal Public Service, the inadequacy on the part of the preparedness of the operational staff of the system will lead to its failure. Since new staff is not needed to be recruited, it is common knowledge that staff currently working on the manual operation can be converted to work on this computerized system. It should be noted that basic computer operational skills are required and extensive training of the designed system cannot be over

emphasized. A user manual and on-line help system could also be designed to complement the above mentioned training in order to keep the staff well informed on the computerization process.

CHAPTER THREE

SYSTEM ANALYSIS AND DESIGN

3.1 Feasibility study

This is a preliminary stage that determines whether or not the proposed project is desirable. Thus, it involves the study of the existing system in detail in order to provide the management with information about the proposed computerized system which covers the following areas:-

- Designing the computerized system.

- Testing and implementing the computerized system.

For adequate testing and implementing the computerized system, the following areas are to be considered: -

a. Operational Feasibility: - This tests the workability of the proposed information system when developed and installed.

b. Technical feasibility: - This test clarifies if the proposed project can be done with current equipment, existing software technology and available personnel.

c. Economic feasibility: - This test clarifies the financial feasibility, that is, it access cost of implementing a proposed project which covers

the benefit the management/retirees will gain for implementing the project.

3.2 Facts finding technique

There are many facts finding technique but those employed for the purpose of this study are:

- *Interview:* - This is one of the fact-finding tools used for collecting information from different individual. It entails engaging in discussion with people that are involved in the pension scheme in the different establishment and people that are about –to or ready for retirement in order to ascertain their suggestions and comments as well as confirming the relevance of any particular reports or statement required for the preparation for retirement of any public servant.

- *Observation*: - This entail seeing and noticing or watching with keen interest an operation or procedure for a period of time in order to see the procedure by oneself.

- *Special purpose records*: - This requires examination of special records that contains specific records of each staff in the establishment e.g. files, staff list, normal roll, public service rule e.t.c.

3.3 Planning for a computer based retirement procedure

The method selected for the new system is determined by the present set of document used, which is fairly adequate to be modified with the design of new formats to form the basis for the computerized information system. The files and programs are kept as simple as possible to be user-friendly in relation to computerization of a pension administration system.

Thus, initial step towards system design is the identification of system requirements and the formulation of design alternative. These requirements are those factors or details that have to be incorporated into the proposed system to provide desired output. These factors have to be borne in mind during the system design:

- Identification of areas that require improvement and/or modification for computerization in the retirement procedure of the organization.

- Development of a standard/unique system to achieve the computerized requirements.

- Assurance that the proposed system is easy to operate, and comprehended by all user staff, by designing on screen forms to look and update the records when need be like manual forms.

3.3.1 Design Strategies for implementing computer-base retirement procedure:

In designing the system, the following strategies are adopted.

- Identification of current system requirements

- Data selection and organization for storage purposes

- Planning for system efficiency and reliability.

- Economic cost comparism that is, determination of the cost of implementing the proposed system.

3.3.2 Planning procedure requirements

- Determination of input data or information

- Organization strategies of the system manipulation of the input data or information.

- Determination of the capacity of current hardware and software to be used by the computerization procedure.

- Determination of the user of the computerized procedure and the capability of such user.

- Determination of protection of the computerized procedure from unauthorized user and illegal manipulation by authorized user

- Projection of future database needs.

3.3.3 Potential obstacles

- User's nonchalant attitude towards data update to the computerized procedure, leading to the exhibition of system under-utilization.
- Over dependency on the computerized procedure could lead to the assumptions that the system is fail proof.
- Data lost due to user's lack of adequate maintenance culture.
- Unauthorized access to stored data and information.
- User adaptation to old system.
- System malfunctioning.

3.3.4 Solving potential obstacles

- Organization of adequate training of operators, users and all personnel concerned with the use of the new system.
- Provision of periodic/routine backup of stored information
- Adequate access control and user verification methods should be built into the software.
- Provision of adequate management control. E.g. the management should always be provided with summarized update report on a weekly, monthly, quarterly, bi-annually and annually in order to observe trends and performance so that necessary checks and control can be carried out on the information.

CHAPTER FOUR

4.0 PROGRAM/ SOFTWARE DEV. AND IMPLEMENTATON

4.1 INTRODUCTION

This chapter focuses more at providing the users with the necessary information needed on how to install and run the system efficiently and effectively. Indeed, all aspects of the system were operationally tested prior to their use. This thereby allows the software designed to be accepted

4.2 CHOICE OF LANGUAGE

In developing this system, Dbase IV programming language was used. It is software that is accessible to authorized managers and other personnel of administrative purposes.

Dbase is powerful and flexible such that it is being used in financial, business and personnel application by management.

4.3 FEATURES OF LANGUAGE CHOSEN

This includes the following:-

a.   Data redundancy is eliminated.

b.   Easier, logical access to data

c.   Data sharebility is increased.

d.   Facilities to add new, delete and amend records

e.   Data are centrally controlled

4.4 WORKSTATION REQUIREMENTS

The system is designed to run on the personal computer.

a. HARD WARE REQUIREMENTS

IBM-PC or Compatible

Floppy Disk Drive

RAM- 32MB

One hard disk drive

Standard keyboard

Printer-Laser Jet 5L or 6L/ Dot matrix

Stabilizer or UPS

b. SOFTWARE REQUIREMENTS

System software MS-DOS 6.0

Application Software-Dbase IV

4.5 INPUT DESIGN

The input to any system is very vital as it will determine the output. Input to the computerized retirement procedure system is possible through choices to men optims and data entry forms. Cords are captured through the data entry form and stored in the database.

4.6 DATABASE DESIGN

Database is used to store records on a more permanent basis. It is very essential that appropriate information is stored in the dataset about each record. Two major databases were used in designing the retirement procedure.

ACIVILIAN.DBF

Field names

PNUM	chapter	14	
PNAME	"	20	
BASIC	Numeric	10	2
ARREARS	"	10	2
Tax	"	10	2
STATION	Character	10	
PAY POINT	Character	10	
HSCHIEME	NUMERIC	10	2

HOUSING	"	10	2
VEHICLE	"	10	2
COOP	"	10	2

2. **NORMAL DBF**

Field names

PNUM	CHARACTER	14
PNAME	"	20
DATE BT	DATE	
DATE EF		
DATERT		
DATEAT		

4.7 OUTPUT DESIGN

Three major types of output can be produced from the programme.

1. *Data listing:-* detail listing constrains list of retired personnel with their number, names, basic person, arrears, tax, H-scheme, Union dress, Loan etc.

2. *File Summary:* - This report contains pensioners name, numbers, date of birth, Date of 1st appointment, and date of retirement.

3. ***Personal pay card:*** - This is a personal report for each pensioner.

4.8 PROCEDURE:- (OPERATIONAL MANUAL)

The program is writer in Dbase IV. To have access to the program the user will have to run Dbase e.g.

C: D CD Dbase

C/Dbase > Dbase

At the Dbase dot prompt, the user can execute the program by hyping:-

DO PENSION

The password screen is displayed and the user is only given access to the program of the correct password is supplied.

After the correct password has been supplied the main men appears, which are thus:-

1. ADD RECORD(S)

2. MODIFY RECORD (S)

3. DELETE RECORD (S)

4. VIEW RECORDS(S)

5. PROCESS RECORD (S)

6. EXIT PROGRAM

The user selects the appropriate item from the menu that corresponds to the user need. To add records to the database the user will select the ADD RECORD(S) option. The process option open another menu.

1. PERSONAL

2. SUMMARY

The personal option is selected to print personal they card. The summary options give another menu.

1. DETAIL LISTING.

2. SUMMARY

the user selects the appropriate options to produce the desired report.

4.9 CHANGEOVER:

File conversion: This is a vital activity, which is sometimes underestimated. It involves the conversion of the old file data into the form required by the new system, and it is usually a very expensive stage in the whole project.

Although, it is usually regarded as a part of changeover, in fact file conversion is often a complete and separate system in itself, involving fact-finding analysis, data capture, the design of clerical methods and computer processes, form design, and the production of special training courses setting up raw master files for large systems can involve the transfer of hundreds of thousands of records which may be, beyond the data handling capacity of an organization and must be subcontracted else where.

Changeover: the changeover from the old to the new system may take place when:

- the system has been proved to the satisfaction of the system analyst and the other implementation activities have been completed.

- User managers are satisfied with the results of the system tests, staff training and reference manuals.

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\- The target date for changeover is due.

The changeover may be achieved in a number of ways. The most common methods are: - direct, parallel running, pilot running and staged changeover. For the purpose of this study parallel running will be utilized.

i. ***Direct changeover.*** - This method is the complete replacement of the old system by the new, in one move. It is bold move, which should be undertaken only when everyone concerned has confidence in the new system. When a direct changeover is planned, system tests and training should be comprehensive and the changeover itself planned in detail. This method is potentially the least expensive but the most risky. For security reasons, the old system may be held in abeyance, including people and equipment. In the event of a major failure of the new system the organization would revert to the old system.

ii. ***Parallel running:*** This means processing current data by both old and new system in order to cross check results. It main attention is that the old system is kept alive and operational until the new system has been proved for at least one system cycle, using full live data in the real operational environment of place, people, equipment and time. It allows the results of the new system to be

compared with the old system before acceptance by the user, thereby promoting user confidence. Its main disadvantage is the extra cost, the difficulty and (sometimes) the impracticability, of user staff having to carry out the different clerical operation for two systems (old and new) on the time available for one.

iii. **Pilot Running:** - This is similar on concept to parallel running. Data from one or more precious records for the whole or part of the system in run on the new system after results have been obtained from the old system, and the new results have compared with the old. It is not as disruptive as parallel operation, since timing is less critical, this method is more like an extended system, test, but it may be considered a more practical form of changeover for organizational reasons.

iv. **Staged changeover:** This involves a series of limited size direct changeover, the new system being introduced piece- by-piece. A complete part, or logical section, is committed to the new system while the remaining parts or sections are processed by the old system only when the selected part is operating satisfactorily is the remainder transferred. This method reduces the risks inherent in a direct changeover of the whole systems. Also enable the analyst

and users to learn from mistakes made as the changeover progresses.

Adversely, it creates problems of controlling the selected parts of the old and new system and it tends to prolong the implementation period.

4.10 Staff Training: In as much that there is a changeover from old procedure to a new procedure there is a serious need for adequate in-house-training for staff. In-house-training will be appropriate since it will save cost and also educate users of the new system on how to operate the system to obtain desired result.

The data analysts will educate the staff during in-house-training the control/feed back of new system before he finally handover the system.

Seminars and workshop will also be organized by the software developer so as to show the users the ability and performance of the software.

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***********************************************************
*      FEDERAL MINISTRY OF ENVIRONMENT, ABUJA       *
*      COMPUTERIZATION OF RETIREMENT PROCEDURE       *
***********************************************************

                    PERSONAL PAY CARD
                    *****************

     Pensioneer's Number:  FME/4513/33333
     Pensioneer's Name:    OLANIYAN OPADOKUN
     Pay Station:          ABUJA
     Pay Point:            MINISTRY

***********************************************************
|              |     Deduction     |          |           |
|Gross Pension |  Tax  |  Misc  |  Netpay  |Verification|
***********************************************************
|   12300:00   | 240.00| 3510.00| 8550.00 |            |
***********************************************************
```

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************************************************************
*    FEDERAL MINISTRY OF ENVIRONMENT, ABUJA        *    *
*    COMPUTERIZATION OF RETIREMENT PROCEDURE        *
************************************************************

                    PERSONAL PAY CARD
                    *****************

    Pensioneer's Number:  FME/4323/31111
    Pensioneer's Name:    PIUS JALINGO
    Pay Station:          ABUJA
    Pay Point:            MINISTRY

************************************************************
.|              |    Deduction  |              |           |
|Gross Pension  |  Tax  |  Misc  |  Netpay   |Verification|
************************************************************
|   12300.00    | 210.00| 3754.00|  8336.00  |           |
************************************************************
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***********************************************************
*         FEDERAL MINISTRY OF ENVIRONMENT, ABUJA        *
*         COMPUTERIZATION OF RETIREMENT PROCEDURE       *
***********************************************************


                    PENSION FILE SUMMARY
                    *********************
```

S/N	Pensioner's Number	Pensioner's Name	Date of Birth	Date of 1st Appt.	Date of Retiremt.
1	FME/1111/11111	ADAPO PARIOLA	12/12/44	12/10/70	12/11/90
2	FME/2222/22222	VINCENT IBRAHIM	11/11/32	11/12/65	02/11/94
3	FME/3133/33332	JOSHUA BABATUNDE	12/02/23	12/04/56	12/11/00
4	FME/5444/44333	FRIDAY BADMUS	11/10/35	12/11/62	12/11/01
5	FME/4513/33333	OLANIYAN OPADOKUN	03/04/35	03/04/60	05/05/97
6	FME/4312/2122	BALARABE IDRIS	12/11/40	12/12/65	12/11/92
7	FME/4323/31111	PIUS JALINGO	11/11/44	11/11/62	11/11/98
8	FME/3412/22222	KALEJAIYE SANMI	11/10/41	08/08/65	08/08/99
9	FME/4533/11119	HELENA DROSS	11/01/55	01/02/72	12/12/98

PENSIONER DETAIL LISTING
****

S/No	Pensioner's Number	Pensioner's Name	Basic Pension	Arrears	Tax	H-Scheme (Union)	Union Dues	Housing Loan	Vehicle Loan	NETPAY	Signature
1	FME/1111/11111	ADAPO PARIOLA	12200.00	0.00	240.00	0.00	500.00	0.00	0.00	9460.00	
2	FME/2222/22222	VINCENT IBRAHIM	12200.00	0.00	240.00	0.00	200.00	0.00	0.00	9460.00	
3	FME/3133/33332	JQSHUA BABATUNDE	12300.00	0.00	240.00	0.00	0.00	0.00	0.00	9560.00	
4	FME/5444/44333	FRIDAY BADMUS	10000.00	0.00	240.00	0.00	0.00	0.00	0.00	7260.00	
5	FME/4513/33333	OLANIYAN OPADOKUN	12200.00	100.00	313.00	100.00	0.00	100.00	100.00	8977.00	
6	FME/4312/2122	BALARABE IDRIS	12350.00	450.00	240.00	120.00	0.00	100.00	230.00	9710.00	
7	FME/4323/31111	PIUS JALINGO	12000.00	300.00	210.00	122.00	600.00	344.00	344.00	8936.00	
8	FME/3412/22222	KALEJAIYE SANMI	13500.00	200.00	312.00	222.00	0.00	345.00	455.00	10033.00	
9	FME/4533/11119	HELENA DROSS	11780.00	434.00	123.00	445.00	0.00	55.00	554.00	8583.00	
			108530.00	1484.00	2158.00					81979.00	

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CHAPTER 5

CONCLUSION AND RECOMMENDATION

5.1 SUMMARY

Generally, it is believed that computerization of a system provides accuracy, efficiency and more importantly, it saves time. Thus, it is this writer's opinion that all effort should be made to implement this system.

5.2 CONCLUSION

In as much that the benefits of the computerized system far surpass any shortcoming associated with it and since we are now in computer age considering the inevitable role played by the computer system in our society to proffering solution to cumbersome and sometimes impossible tasks. Hence today's information technology requires the use of computer in all establishment with a well designed and reliable software fashioned after extensive study of an existing procedure to remove all bottlenecks associated with it as illustrated in this project work. For the Federal Public Service retirement procedure to be accurate and efficient, the implementation of this new system is thus a boost and right step in the right direction.

5.3 RECOMMENDATION

Having highlighted the benefits of computerized retirement procedure in this project work, it is imperative that the following recommendations are itemized for efficiency of the system.

➢ Mechanism should be established to ensure that all equipments (hardware) and software are in good operating conditions.

➢ Maintenance of the hardware system should be institutionalized in order to guide against system failure.

➢ Training of operational staff should be done adequately as this will determine the success or failure of the system.

➢ Efforts should be made to implement the system on a network environment. This will make it possible for "privileged" management staff to have access to information that relate to their sphere of operation.

➢ The Federal Government should endeavor to have a complete database of all her staff by given high premium to date of birth and date of first appointment and stored on a single database that would be in a databank located in the Head of Service Office of the Federation. This will facilitate good planning and prompt notification to the staff about to be retired. Also, it will facilitate adequate

budgeting that would also be more realistically done for benefits of staff due for retirement on monthly, quarterly and yearly bases since projections would be done on correct estimate.

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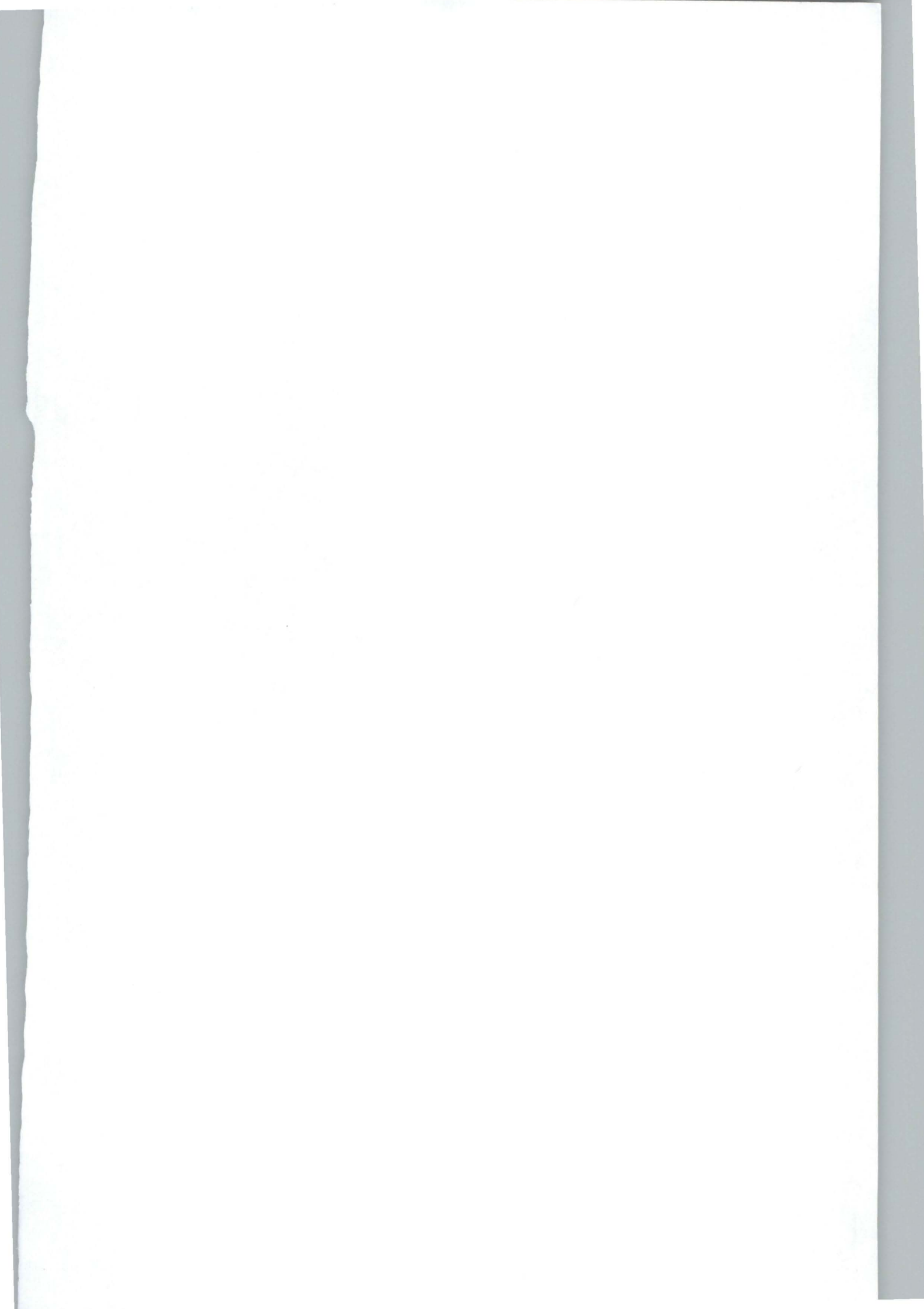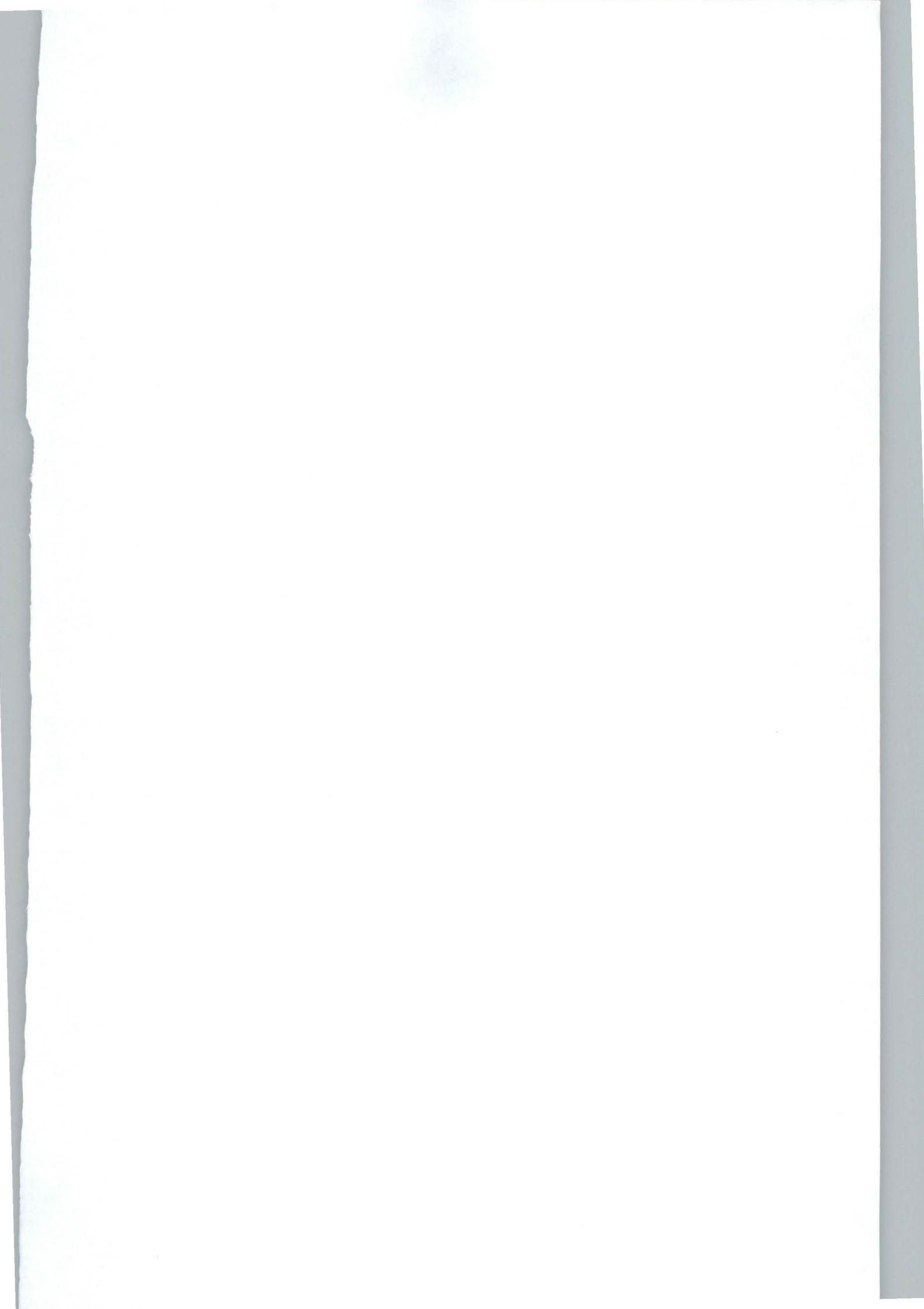
```
*********************************************************************
* OJO OLUGBENGA AUGUSTUS                                 *
* PGD/MCS/2000/2001/1023                                 *
* COMPUTERIZATION OF RETIREMENT PROCEDURE   *
*********************************************************************
SET DISPLAY TO EGA25
SET SPACE OFF
SET CONSOLE ON
SET DELETED OFF
SET BELL OFF
SET ECHO OFF
SET TALK OFF
SET PRINT OFF
SET CLOCK OFF
SET SAFETY OFF
SET SCORE OFF
SET CONFIRM ON
SET DATE TO BRIT
SET CARRY OFF
SET CENTURY ON
SET INSTRUCT OFF
SET DELIMITERS OFF
SET ESCAPE ON
SET MESSAGE TO ""
SET DEVICE TO SCREEN
SET STATUS OFF
CLEA ALL
*SET COLOR TO GR+, G+
CLEAR
DO INTRO
DO PASSWORD WITH "PENSION"
DO DESIGNSC
ABORT = ' '
DO WHILE ABORT = ' '
DO DEFIN
DO MAIN
CLEAR
ENDDO
RETURN


PROCEDURE DEFIN
IF ISCOLOR()
  SET COLOR OF BOX TO GR+/BG
  SET COLOR OF NORMAL TO W+/B
  SET COLOR OF HIGHLIGHT TO GR+/BG
  SET COLOR OF MESSAGES TO W+/N
  SET COLOR OF TITLES TO W/B
  SET COLOR OF FIELDS TO N/BG
```

```
    SET COLOR OF INFORMATION TO B/W
ENDIF
DEFINE WINDOW SEEKNO FROM 12,13 TO 16,67 DOUBLE COLOR GB+/RB
DEFINE WINDOW GETELEV FROM 0,1 TO 23,79 DOUBLE COLOR  W+/B+
SET BORDER TO DOUBLE

*-------------------Popup for Main Menu
DEFINE POPUP PENSION FROM 4,25
DEFINE BAR 1 OF PENSION PROMPT " ADD RECORD(s)";
   MESSAGE "This option allows entry of record"
DEFINE BAR 2 OF PENSION PROMPT " MODIFY RECORD(s)";
   MESSAGE "This option allows correction of record"
DEFINE BAR 3 OF PENSION PROMPT " DELETE RECORD(s)";
   MESSAGE "This option allows deletion of record"
DEFINE BAR 4 OF PENSION PROMPT " VIEW RECORD(s)";
   MESSAGE "This option allows viewing of record"
DEFINE BAR 5 OF PENSION PROMPT " PROCESS RECORD(s)";
   MESSAGE "This option allows processing of record"
DEFINE BAR 6 OF PENSION PROMPT " EXIT PROGRAM";
   MESSAGE "Want to exit the RETIREMENT PROCEDURE SYSTEM"
ON SELECTION POPUP PENSION DO PENSION_PARA


DEFINE POPUP PMAIN2 FROM 7,45
DEFINE BAR 1 OF PMAIN2 PROMPT " WHICH FILE DO YOU WANT ? " SKIP
DEFINE BAR 2 OF PMAIN2 PROMPT "============================" SKIP
DEFINE BAR 3 OF PMAIN2 PROMPT "  DETAIL LISTING ";
   MESSAGE "Generates Detail Listing"
DEFINE BAR 4 OF PMAIN2 PROMPT "  SUMMARY ";
   MESSAGE "Generates Summary."
ON SELECTION POPUP PMAIN2 DO PMAIN2_PARA


DEFINE POPUP OUTPUT FROM 8,45
DEFINE BAR 1 OF OUTPUT PROMPT " OUTPUT FORMAT " SKIP
DEFINE BAR 2 OF OUTPUT PROMPT "================" SKIP
DEFINE BAR 3 OF OUTPUT PROMPT "  PERSONAL ";
   MESSAGE "Individual Payslip"
DEFINE BAR 4 OF OUTPUT PROMPT "  SUMMARY ";
   MESSAGE "Pay Information for all Pensioners"
ON SELECTION POPUP OUTPUT DO OUTPUT_PARA

*-----------> Popup for Exit
DEFINE POPUP EXITM FROM 10,45
DEFINE BAR 1 OF EXITM PROMPT "EXIT TO DOT PROMPT"
DEFINE BAR 2 OF EXITM PROMPT "EXIT TO DOS "
ON SELECTION POPUP EXITM DO EXIT_PARA
```

```
PROCEDURE DESIGNSC
* -----------------> This section design the screen
HEAD1 = "FEDERAL MINISTRY OF ENVIRONMENT, ABUJA"
HEAD2 = "COMPUTERIZATION OF RETIREMENT PROCEDURE"
HEAD3 = "RETIREMENT PROCEDURE SYSTEM"
HEAD4 = "  "
DEFINE WINDOW MAINSC FROM 0,0 TO 23,79 NONE COLOR W+/B
DEFINE WINDOW WORK_IN FROM 8,5 TO 21,75 NONE COLOR W+/B
X1 = MAX(LEN(TRIM(HEAD1)), LEN(TRIM(HEAD2)))
X2 = MAX(LEN(TRIM(HEAD3)), LEN(TRIM(HEAD4)))
X  = INT((80-MAX(X1,X2))/2) - 1
Y  = X + MAX(X1,X2) + 1
DEFINE WINDOW HEADSC FROM 0,X TO 5,Y+1 DOUBLE COLOR W+/G+
ACTIVATE WINDOW MAINSC
SET CLOCK ON
SET CLOCK TO 2,68
@ 2,5 SAY DATE()
ACTIVATE WINDOW HEADSC
@ 0,INT((Y-X-LEN(HEAD1))/2)+1 SAY HEAD1
@ 1,INT((Y-X-LEN(HEAD2))/2)+1 SAY HEAD2
@ 2,INT((Y-X-LEN(HEAD3))/2)+1 SAY HEAD3
@ 3,INT((Y-X-LEN(HEAD4))/2)+1 SAY HEAD4
ACTIVATE WINDOW WORK_IN
RETURN


PROCEDURE INTRO
DO DESIGNSC
DECLARE DATA [10]
STORE "THIS PROGRAM BELONGS TO:" TO DATA[1]
STORE "OJO OLUGBENGA AUGUSTUS " TO DATA[3]
STORE "REG. NUM: PGD/MCS/2000/2001/1023" TO DATA[4]
STORE "PROJECT TOPIC:" TO DATA[6]
STORE "COMPUTERIZATION OF RETIREMENT PROCEDURE " TO DATA[7]
STORE "CASE STUDY OF FEDERAL MINISTRY OF ENVIRONMENT" TO
DATA[8]
STORE "ABUJA" TO DATA[10]
STORE SPACE(1) TO DATA[2], DATA[5], DATA[9]
I = 0
DO WHILE I < 10
I = I + 1
K = 0
DO WHILE K <= LEN(DATA[I])
@I,15+K SAY SUBSTR(DATA[I],K,1)
K = K + 1
J = 0
DO WHILE J < 20
J = J + 1
ENDDO
```

```
        ENDDO
        ENDDO
        WAIT
        CLEAR ALL
        CLEAR
        RETURN

        PROCEDURE PASSWORD
        parameter pass
        SET COLOR TO GR+, G+
        CLEA
        trial = 0
        store space(6) to pword
        do while trial <= 3
        @8,33 say "Security"
        @10,12 to 12,61 doubl
        @11,13 say "  Enter your password      "
        set colo to R,B,W+,B
        @11,37 clear to 11,41
           store 0 to k, counter
           Pword = space(0)
           p = 37
           @ 11,37 say spac(23)
        do while counter < 6 .and. k<>13
           p= p+1
           k=0
        Do while k = 0
          k = inkey()
        enddo
         set colo to /gb+
          if k <> 13
            @11,p say "%"
            pword = pword + chr(k)
          endif
        enddo
           if pword <> pass
              trial = trial + 1
           @ 11,14 say space(30)
           @ 11,14 say "Invalid Password, Try Again"
           wait ""
           loop
           else
           exit
           endif
        enddo
        if pword = pass
           @ 11,14 say space(30)
           @ 11,14 say "Correct Password, Access Granted"
```

```
      return
  else
    QUIT
  endif
  return


  PROCEDURE MAIN
  STORE 0 TO  BARKEY, FILEBAR
  ACTIVATE WINDOW WORK_IN
  ACTIVATE POPUP PENSION

  PROCEDURE PENSION_PARA
  BARKEY = BAR()
  IF BARKEY >= 1 .AND. BARKEY  < 6
    DO SELECTER
  ELSE
  IF BARKEY = 6
    ACTIVATE POPUP EXITM
    DEACTIVATE POPUP
  ENDIF
  ENDIF
  RETURN

  PROCEDURE SELECTER
  DO CASE
    CASE BARKEY = 1
        DO ADDREC
    CASE BARKEY = 2
        DO MODREC
    CASE BARKEY = 3
        DO DELREC
    CASE BARKEY = 4
        DO VIEWREC
    CASE BARKEY = 5
        ACTIVATE POPUP OUTPUT
        DEACTIVATE POPUP
    CASE BARKEY = 6
        ACTIVATE POPUP EXITM
        DEACTIVATE.POPUP
  ENDCASE
  RETURN

  PROCEDURE PMAIN_PARA
  FILEBAR = BAR() - 2
  DO SELECTER
  RETURN
```

```
PROCEDURE OUTPUT_PARA
DO CASE
  CASE BAR() = 3
    DO PERSONAL
  CASE BAR() = 4
    ACTIVATE POPUP PMAIN2
    DEACTIVATE POPUP
ENDCASE
RETURN


PROCEDURE PMAIN2_PARA
DO CASE
  CASE BAR() = 3
    DO CIVILIAN
  CASE BAR() = 4
    DO NORMAL
ENDCASE
RETURN


PROCEDURE EXIT_PARA
DO CASE
  CASE BAR() = 1
      CANCEL
  CASE BAR() = 2
      QUIT
ENDCASE
RETURN



PROCEDURE CIVILIAN
USE CIVILIAN
set alternate to "civ.out"
set alternate on
store 0 to sn, totalb, totala, totalt, totaln
?space(41),REPLICATE("*",47)
?space(41),"*   FEDERAL MINISTRY OF ENVIRONMENT, ABUJA    *"
?space(41),"*   COMPUTERIZATION OF RETIREMENT PROCEDURE   *"
?space(41),REPLICATE("*",47)
?
? space(52),"PENSIONER DETAIL LISTING"
? space(52),REPLICATE("*",26)
?
? REPLICATE("*",128)
? "|   |  Pensioner's  |   Pensioner's   | Basic |        |    |"
?? "H-Scheme| Union |Housing|Vehicle|        |      |"
? "|S/No|   Number   |     Name     | Pension | Arrears | Tax |"
?? " (Union)| Dues  | Loan  | Loan  | NETPAY | Signature |"
? REPLICATE("*",128)
```

```
GO TOP
DO WHILE .NOT. EOF()
  sn = sn + 1
  store 0 to mnetpay
  ? "| ",str(sn,2)," | ",pnum," |.",pname,"|",
  ?? str(basic,9,2),"|",str(arrears,9,2),"|",
  ?? str(tax,7,2),"|",str(hscheme,8,2),"|",str(union,7,2),"|",
  ?? str(vehicle,7,2),"|",str(coop,7,2),"|"
  mnetpay = basic + arrears - (tax + coop +;
               vehicle + hscheme + housing)
  ?? str(mnetpay,9,2),"|",space(11),"|"
  totalb = totalb + basic
  totala = totala + arrears
  totalt = totalt + tax
  totaln = totaln + mnetpay
  ? REPLICATE("*",128)
  skip
ENDDO
  ? space(44),"|",
  ?? str(totalb,9,2),"|",str(totala,9,2),"|",
  ?? str(totalt,7,2),"|",space(8),"|",space(7),"|",
  ?? space(7),"|",space(7),"|"
  ?? str(totaln,9,2),"|",space(11),"|"
  ? space(44),REPLICATE("*",84)
RETURN

PROCEDURE NORMAL
USE NORMAL
set alternate to "gen.out"
set alternate on
sn = 0
DEFINE WINDOW SHOWM FROM 0,0 TO 23,79 NONE COLOR W+/B
ACTIVATE WINDOW SHOWM
DO HEADER
? space(30),"PENSION FILE SUMMARY"
? space(30),REPLICATE("*",20)
?
? REPLICATE("*",77)
? "|S/N| Pensioner's  |    Pensioner's   |"
?? " Date of | Date of | Date of |"
? "|  |  Number   |     Name      |"
?? " Birth  |1st Appt. | Retiremt.|"
? REPLICATE("*",77)
GO TOP
DO WHILE .NOT. EOF()
  sn = sn + 1
  ? "|",str(sn,2)," | ",pnum," | ",pname,"| ",datebt," | ",dateat," | "
  ?? datert," |"
```

```
    ? REPLICATE("*",77)
    skip
ENDDO
WAIT
DEACTIVATE WINDOW SHOWM
CLEAR
RETURN

PROCEDURE PERSONAL
  USE CIVILIAN
  store 'Y' to ans
  do while ans= "Y"
    clea
    @2,20 to 4,52
    @3,24 say 'Printing Personal Record'
    store space(14) to mpnum
    DO PENNUM
    locate all for pnum = mpnum
    if found( )
set alternate to "per.out"
set alternate on

DEFINE WINDOW SHOWME FROM 0,0 TO 23,79 NONE COLOR W+/B
    ACTIVATE WINDOW SHOWME
    DO HEADER
    ? space(30),"PERSONAL PAY CARD"
    ? space(30),REPLICATE("*",17)
    ?
    ? space(16),"Pensioneer's Number: "+pnum
    ? space(16),"Pensioneer's Name:   "+pname
    ? space(16),"Pay Station:       "+station
    ? space(16),"Pay Point:         "+paypoint
    ?
    ? space(10),replicate("*",57)
    ? space(10),"|           |   Deduction  |      |.       |"
    ? space(10),"|Gross Pension | Tax | Misc | Netpay |Verification|"
    ? space(10),replicate("*",57)
    store 0 to gross, misc, mnetpay
    gross = basic + arrears
    misc = hscheme + union + vehicle+ housing + coop
    mnetpay = gross - (tax + misc)
    ? space(10),"| ",str(gross,11,2)," |",str(tax,7,2)
    ?? "|",str(misc,8,2),"|",str(mnetpay,9,2)," |",space(12),"|"
    ? space(10),replicate("*",57)
    WAIT
    DEACTIVATE WINDOW SHOWME
    else
    @8,30 say 'Record does not exist'
```

```
    endif
    @11,20 to 13,60
    store 'N' to ans
    @12,22 say 'Print more records? (Y/N)' get ans pict '!'
    read
enddo
close databases
clear
return


Procedure PENNUM
@5,12 to 7,61 doubl
@6,14 say "Enter Pensioner's Number    " get mpnum pict "XXX/9999/99999"
read
return


Procedure ENTRY
CLEAR
@ 1,3 say "NAME : " GET MPNAME PICT "@!"
@ 3,3 say "DATE OF BIRTH: " GET MDATEBT PICT "99/99/99"
@ 3,35 say "DATE OF 1st APPOINTMENT: " GET MDATEAT PICT "99/99/99"
@ 5,3 say "DATE OF RETIREMENT: " GET MDATERT PICT "99/99/99"
@ 5,35 say "EFFECTIVE PENSION DATE: " GET MDATEET PICT "99/99/99"
if barkey <> 4
  READ
endif
  @ 7,3 say "MINISTRY: " GET MMINISTRY PICT "@!"
  @ 7,35 say "GRADE LEVEL: " GET MGRADELEV PICT "99"
  if barkey <> 4
    READ
  else
    wait
  endif
  DO CIVENTRY
return


Procedure CIVENTRY
CLEAR
@ 1,3 say "BASIC AMOUNT: " GET MBASIC PICT "999999.99"
@ 1,35 say "ARREARS: " GET MARREARS PICT "999999.99"
@ 3,3 say "TAX: " GET MTAX PICT "999999.99"
@ 3,35 say "HOUSING SCHEME: " GET MHSCHEME PICT "9999.99"
@ 5,3 say "UNION DUES: " GET MUNION PICT "9999.99"
@ 5,35 say "HOUSING LOAN: " GET MHOUSING PICT "9999.99"
@ 7,3 say "VEHICLE LOAN: " GET MVEHICLE PICT "9999.99"
@ 7,35 say "CO-OPERATIVE LOAN: " GET MCOOP PICT "9999.99"
@ 9,3 say "PAY STATION: " GET MSTATION PICT "@!";
```

```
  valid MSTATION $ "OMU-ARAN  ILORIN" error "Invalid Entry!!!"
@ 9,35 say "PAY POINT: " GET MPAYPOINT PICT "@!"
if barkey <> 4
  READ
else
  wait
endif
USE NORMAL
return

Procedure ADDREC
 store 'Y' to ans
 set stat off
do while ans ='Y'
  USE NORMAL
  clear
  store space(14) to mpnum
  DO PENNUM
  locate all for pnum = mpnum
  if found()
    @8,30 say 'Record already exist'
  else
  store space(20) to mpname
  store "MINISTRY" to mpaypoint
  store space(10) to mministry
  store space(8) to mdatebt, mdateat, mdateet, mdatert
  store 0 to  mgradelev
  store space(10) to mdpm_num, msvc_num, mbankno
  store 0 to marate, mmrate, mcdeduc, munpen
  store 0 to marpen
  store space(10) to mstation
  store space(1) to mc_or_b
  store 0 to mbasic, marrears, mtax, mhscheme, munion
  store 0 to mhousing, mvehicle, mcoop
  DO ENTRY
  append blank
  replace pname with mpname, datebt with mdatebt
  replace dateet with mdateet, datert wit         t
  replace pnum with mpnum, dateat with mdateat
  replace ministry with mministry
  replace gradelev with mgradelev
    USE CIVILIAN
    append blank
    mnetpay = mbasic + marrears  - (mtax + mcoop +
             mvehicle + mhscheme + mhousing)
    replace pnum with mpnum, pname with mpname
    replace basic with mbasic
    replace arrears with marrears, tax with mtax
```

```
        replace station with mstation, paypoint with mpaypoint
        replace hscheme with mhscheme, housing with mhousing
        replace vehicle with mvehicle, coop with mcoop
    endif
    @10,15 to 12,45
    store 'N' to ans
    @11,18 say 'Enter more records? (Y/N)' get ans pict '!';
            valid ans $ 'YN' error 'Invalid entry !!!'
    read
    close databases
  enddo
  clear
  return


Procedure DELREC
: store 'Y' to ans
  do while ans= 'Y'
    USE NORMAL
    clea
    @2,25 to 4,47
    @3,28 say 'Deletion of record'
    store space(14) to mpnum
    DO PENNUM
    locate all for  pnum = mpnum
    if found( )
    @11,20 to 13,60
    store 'N' to reply
    @12,22 say 'Are you sure? (Y/N)' get reply pict '!';
        valid reply $ 'YN' error 'Invalid entry!!!'
    read
    if reply = 'Y'
       dele
       PACK
          USE CIVILIAN
       locate all for  pnum = mpnum
       dele
       PACK
    endif
  else
    @8,30 say 'Record does not exist'
    endif
    @11,20 to 13,60
    store 'N' to ans
    @12,22 say 'Delete more records? (Y/N)' get ans pict '!'
    read
  close databases
  enddo
```

```
clear
return


Procedure VIEWREC
  store 'Y' to ans
  do while ans = 'Y'
    USE NORMAL
    clea
    store space(14) to mpnum
    DO PENNUM
    locate all for pnum = mpnum
if found()
  store pname to mpname
  store ministry to mministry
  store datebt to mdatebt
  store dateat to mdateat
  store dateet to mdateet
  store datert to mdatert
  store gradelev to mgradelev
    USE CIVILIAN
    locate all for pnum = mpnum
        store station to mstation
        store paypoint to mpaypoint
        store basic to mbasic
        store arrears to marrears
        store tax to mtax
        store hscheme to mhscheme
        store union to munion
        store housing to mhousing
        store vehicle to mvehicle
        store coop to mcoop
  DO ENTRY
else
   @8,30 say 'Record does not exist'
endif
CLEAR
   @11,20 to 13,60
   store 'N' to ans
   @12,22 say 'View more records? (Y/N)' get ans pict '!';
         valid ans $ 'Y/N' error 'Invalid entry!!!'
   read
close databases
enddo
clear
return

Procedure MODREC
```

```
store 'Y' to ans
do while ans = 'Y'
  USE NORMAL
  clea
  store space(14) to mpnum
  DO PENNUM
  locate all for pnum = mpnum
if found()
store pname to mpname
store ministry to mministry
store datebt to mdatebt
store dateat to mdateat
store dateet to mdateet
store datert to mdatert
store gradelev to mgradelev
  USE CIVILIAN
  locate all for pnum = mpnum
        store station to mstation
        store paypoint to mpaypoint
        store basic to mbasic
        store arrears to marrears
        store tax to mtax
        store hscheme to mhscheme
        store union to munion
        store housing to mhousing
        store vehicle to mvehicle
        store coop to mcoop
  DO ENTRY
  replace pname with mpname, datebt with mdatebt
  replace dateet with mdateet, datert with mdatert
  replace pnum with mpnum, dateat with mdateat
  replace ministry with mministry
  replace gradelev with mgradelev
    USE CIVILIAN
    replace pnum with mpnum, pname with mpname
    replace basic with mbasic
    replace arrears with marrears, tax with mtax
    replace station with mstation, paypoint with mpaypoint
    replace hscheme with mhscheme, housing with mhousing
    replace vehicle with mvehicle, coop with mcoop
else
  @8,30 say 'Record does not exist'
endif
  @11,20 to 13,60
  store 'N' to ans
  @12,22 say 'Modify more records? (Y/N)' get ans pict '!';
          valid ans $ 'Y/N' error 'Invalid entry!!!'
  read
```

```
close databases
enddo
clear
RETURN

PROCEDURE HEADER
?space(16),REPLICATE("*",47)
?space(16),"*   FEDERAL MINISTRY OF ENVIRONMENT, ABUJA    *"
?space(16),"*   COMPUTERIZATION OF RETIREMENT PROCEDURE   *"
?space(16),REPLICATE("*",47)
?

RETURN
```