COMPUTER APPROACH TO PAY-AS-YOU-EARN (PAYE) SYSTEM IN AN ORGANISATION. (A CASE STUDY OF NATIONAL EXAMINATIONS COUNCIL, (NECO), MINNA)

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MARCH 2000

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A PROJECT SUBMITTED TO THE DEPARTMENT OF MATHEMATICS/COMPUTER SCIENCE, FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA

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

MARCH 2000

CERTIFICATION

This project work has been read and certified by the undersigned as meeting the requirements of the Department of Mathematics/Computer Science, Federal University of Technology, Minna.

PRINCE R. O.BADAMOSI PROJECT SUPERVISOR	DATE
DR. S.A. REJU HEAD OF DEPARTMENT	DATE
EXTERNAL EXAMINER	DATE

DEDICATION

This work is solely dedicated to my wife Mrs. OLABISI GANIYAT FOLASHADE and my daughter FATIMAT BINTA OLABISI and to my well wishers both at home and abroad.

ACKNOWLEDGEMENT

Life itself is full of ups and downs, yet the survival of every individual depends upon God and individual hard work and concern. Based on this assumption, I give much honour to the Almighty Allah for his guidance, love and concern thus far.

Indeed, I owe a lot of gratitude to my Project Supervisor Prince R.O. Badmus. A man of high integrity, his love for others is superb. Despite his tight schedule, he took time to proof-read, make corrections and necessary adjustments to make the project worth itself.

My special Prince Badmus, what else can one say but to thank God to spare your life for good things in life. Keep up your good work.

To the head of department, I wish to say thank you. To my other lecturers who are too numerous to mention here, I owe you a special gratitude for the knowledge imparted in us.

To my employer, I can not forget the wonderful time and concern shown to me during the program. You have been very wonderful. To all, I am indebted for your permission and time.

To my darling wife, you have been very sweet and understanding. Thanks for your support. My classmates, you have all been friendly. To my fiends, colleagues and

relations, I want to place on record your moral support at all times even when I almost gave up continuing with the program.

Thanks a lot to all concerned.

ABSTRACT

The initial need of any organisation is a sound revenue base before organisation intentions could be translated into reality. On the other hand, the government has various ways of raising revenue for the purpose of meeting its expenditure. Thus, PAYE is one of the methods used particularly in organisations and other institutions.

Indeed, PAYE (PAY AS YOU EARN) is a direct tax that covers all the employees and every one that earn income. This returns is a large workload particularly with the organisation under study. It is in this light that the need to employ computer to handle this large volume of data in this section is desirable particularly in NBEM.

A database IV approach will be used to achieve the maximum response to this aspect of income generation particularly in most organisations and institutions where manual method of making returns is been carried out in which National Board for Education Measurement is not an exception.

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CHAPTER ONE

INTRODUCTION

1.0 GENERAL COMPUTER APPLICATION

Computers are increasingly becoming indispensable. Many tasks at home, offices that were hitherto executed manually are being automated at a very fast face. This, it is becoming apparent that in whatever discipline of study or nature of employment, the computer is now an important tool for efficiency, improvement and precision of job or task execution.

Computers are now part and parcel of humanity. It is only better imagined what life would have been without them. Every door locks are now computerized. As for big uses, the AIRBUS aeroplane is like a super computer in the air. The pilot can actually go to sleep while the plane is cruising and the passenger will never be able to tell what is happening in the cockpit, because the computers is able to fully take charge. With the computerized Axil Tomograph (CAT) Scanning, this made X-RAYS obsolete system.

1.1 OBJECTIVES OF THE PROJECT

The main thrust of this project is to have a computer-based system for PAY-AS-YOUR-EARN (PAYEE) Scheme to be used by the Accounts department of NATIONAL BOARD FOR EDUCATIONAL MEASUREMENT (NBEM) Hence, the

study is designed:

(a) To aid proper Collection and recording of the tax

(b) To handle all Calculations related to personal Income tax

(c) To enlighten the public about personal Income tax through information technology

(d) It will promote information documentation and information retrieval

(e) It will curb fraudulent act of the staff of tax authority.

(f) To save time of all the operations in taxation.

(g) To monitor any tax evasion.

1.2 TAXATION (AN OVERVIEW)

Taxation in one form or the other is one of the oldest institutions on earth today. Tax has been variously defined by various people. The following are few of such definitions:-

(1) A compulsory contribution from the person to the government to defray the expenses incurred in the common interest of all, without reference to special benefit conferred.

(2) A compulsory contribution of the wealth of a person or body of persons for the services of the public powers.

Taxation is therefore, a process of levying and collection by a public authority, with proper jurisdiction, of compulsory contributions from person or body of persons to defray costs incurred by the authority in common interest of all.

In every country of the world, even in America with a strong belief in right of private property, government undertakes a lot of activities for common good, and government entrants in various proportions from wealth of the citizens for this purpose. As a result of process of taxation, some taxpayers found themselves with less money to spend and the government finds itself with more money.

In Nigeria, the introduction of personal income tax dates back to pre-colonial to the present day. In the twenties, imposition of income tax was resisted, but between 1943 and 1955, series of tax laws and amendments were made. Income tax Ordinances Caps 85 and 92 were the earlier statutes forming to basic on which subsequent tax laws revolved. The income tax rates, reliefs and allowances have been reviewed to reflect true earning capacity, money value and additional responsibility, which the present economic situation has imposed on the struggling population in Nigeria.

1.3 METHODOLOGY

Methods employed for collecting data about the present system are interview and questionnaire.

(a) Interview - This is one of the facts-finding tools used for collecting information from individuals or groups in the organisation. The interview technique is one of the best sources of qualitative information.

(b) Questionnaire:- It is an instrument used to collect information in a written form about various aspect of an investigation from large population.

1.4 DEFINITION OF TERMS

(1) Income Tax:- Income tax is a compulsory payment of tax to the government by individual, partnership, trusties, executors and corporation based on their income to the extent that the relevant tax legislation applies to them.

(2) Tax Relief:- Tax relief is that part of the taxpayer's income which is not taxable.

(3) Unearned Income:- Income earned without personal effort e.g. Rental Income.

(4) Itinerant Workers:- An itinerant worker is a person who does not reside permanently in a particular place but goes about in the course of his work, trade, and profession. It therefore, becomes necessary that an itinerant worker should be taxed where ever he is found during the year of assessment to avoid untold hardship and double taxation.

(5) The principal inspector of Tax => He is one in charge of the day-to day control and management of the district under him, including the overall organisation supervision.

(6) Year of Assessment:- This is the period of twelve months commencing on the 1st January of each year.

(7) Income:- The samples arising from revenue transaction. It is the difference by which gross receipts exceed the total expenditure.

(8) Total Income:- This is the year of assessment and the total aggregate assessable income for that year after the additions and deductions.

(9) Chargeable Income:- It is the part of income on which the tax rate is charged for a year of assessment.

CHAPTER TWO

2.0 NATIONAL BOARD FOR EDUCATIONAL MEASUREMENT (NBEM) MINNA (A PERSPECTIVE.

2.1 ESTABLISHMENT OF THE BOARD

The Board of NBEM came into existence in May, 1992 following the scrapping of the Centre for Educational Measurement (CEM); Kaduna. The Board commenced operations in Kaduna, however by August, 1992, the Board on a directive from the Federal Ministry of Education commenced a phased movement to Minna, Niger State; and the movement was completed in December, 1992 and has since commence full operations in Minna.

By the provision of Decree No. 69 of 1993, the Board is vested with powers to carry out various educational activities. The board has been invested with new function of conducting the Senior School Certificate Examinations and thereby changes her name to National Examinations Council (NECO).

2.2 OBJECTIVES AND FUNCTIONS OF THE BOARD

(i) Establishing and maintaining standards at Junior Secondary School (JSS) level in the areas of measurement and evaluation particularly in Federal Government Colleges.

(ii) Providing professional leadership for State Ministries of Education in

matters relating to test development and administration at Junior Secondary School level.

(iii) Monitoring Continuous Assessment practice in schools and ensuring conformity with set standards.

(iv) Working towards overall improvement of educational standards at the Junior Secondary School level nationwide.

(v) Conduct of Senior School Certificate Examination.

2.3 THE ORGANISATION OF THE BOARD

In order to achieve the set goals and objectives and ensure efficiency, the Board has been structured into five-(5) departments namely:-

(i) Finance and Supplies Department. This includes :- Salaries and Wages, Cash office, Stores, Budget, Gratuity and Pensions.

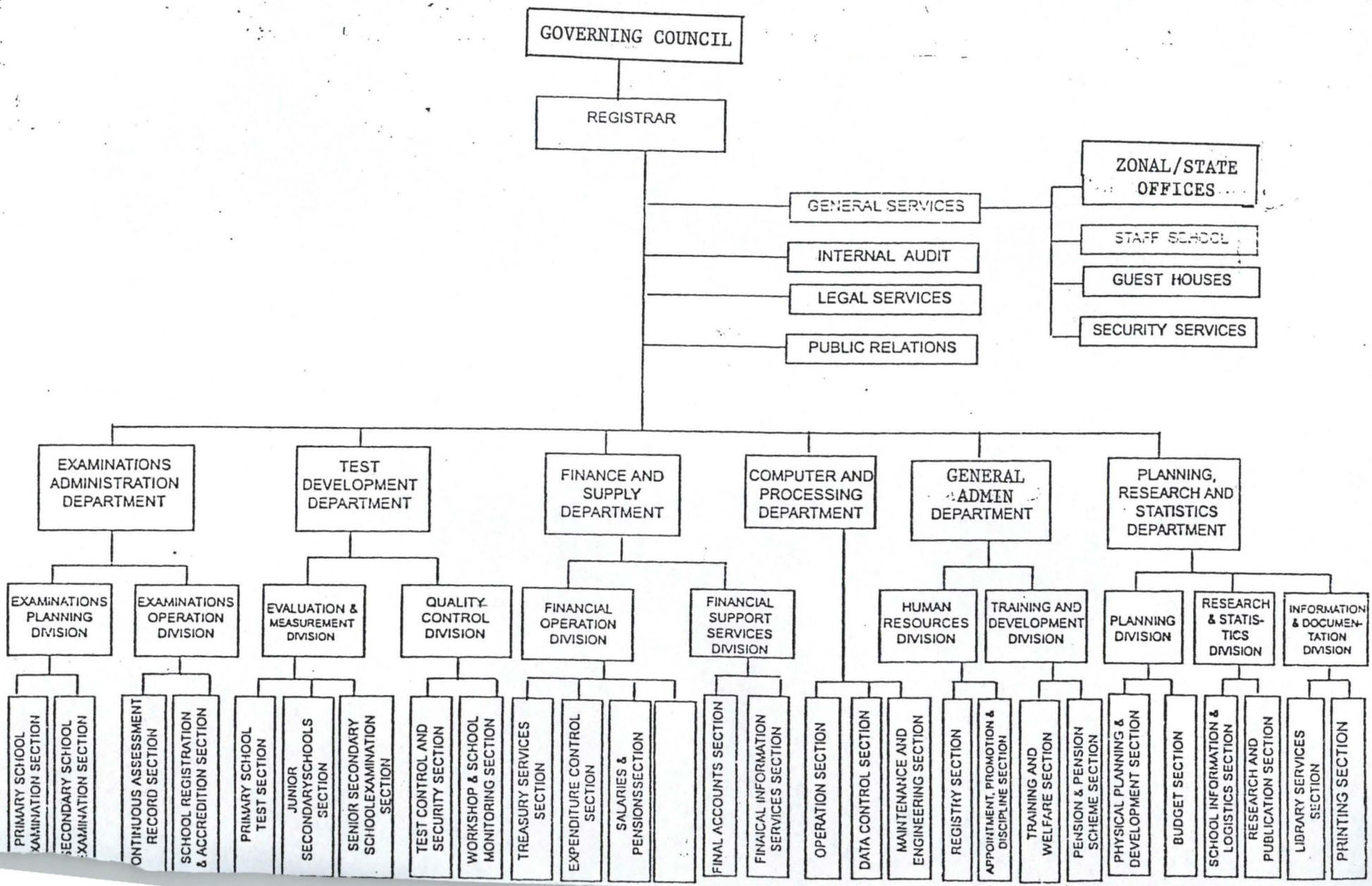
(ii) Planning, Research and Statistics Department. This includes :- Transport, Library, Publications, Maintenance, Security and Board of Survey.

(iii) General Administration. Includes:- Appointments, Promotions, Discipline, Staff Records, Housing and Staff School.

(iv) Examinations Administration Department.

(v) Office of the Registrar. The units under this department includes:- Public Relations Unit, Audit Unit (Internal) Legal Unit, Computer, Tenders, Zonal offices and Consultancy.

ORGANOGRAM OF THE NATIONAL EXAMINATIONS COUNCIL (NECO)



2.4 PERSONS CHARGEABLE TO TAX

The persons chargeable to Personal Income Tax include the following:-

(i) An individual => An Individual is chargeable to tax for a year of assessment if the individual has taxable income for the year

(ii) A Partnership – The income of a partnership is not chargeable to tax in the name of the partnership. The income of a partner from a partnership is chargeable to tax in the hands of the partner concerned.

(iii) An Executor – An executor is the person appointed in accordance with the provision of the relevant law to administer the estate of a deceased individual.

(iv) A Trustee of any trust of Settlement :- Where a trustee of settlement is established and any income accrues from the trust or settlement, the trustee is chargeable to tax on that income.

(v) Agent – A Tax authority may appoint any person as the agent of any other person who has taxable income and assets, the agent so appointed to pay tax on the income such agent may however retain to himself the tax so paid from the money of the principal.

2.5 TAX AUTHORITES (PERSONAL INCOME TAX)

(i) The Joint Tax Board: Section 2 of the Income Tax Management Act (ITMA) provides for the establishment of the Joint Tax Board. The Board consists of the following as members:-

(a) The Chairman of the Federal Board of Inland Revenue who is also the chairman of the Joint Tax Board.

(b) One member from each state being a person who is experienced in Income tax matters nominated either by name or office from time to time by the Commissioner responsible for the income tax matters.

The Duties of the Joint Tax Board

(i) Giving advice to the Federal Government in respect of double taxation arrangements concluded or under consideration with any other government.

(ii) Giving advice to the Federal Government in respect of rates of capital allowances and other taxation matters having any effect throughout Nigeria and in respect of any amendment of ITMA.

(iii) Promoting uniformity both in the application of ITMA and in the incidence of tax on individuals throughout the federation.

(iv) Considering and approving pension and resettlement benefits schemes.

2.6 ADMINISTRATION OF INCOME TAX RETURNS.

Every individual liable to income tax for a year of assessment is required to submit returns of his income and other relevant matters to the tax authority having such power to assess him/her. Returns are made on prescribed forms, which are obtainable from the office of each tax authority. The following

information is required to be stated in the income tax return forms :-

(i) Amount of the individual's income from each source of income.

(ii) Personal relief and allowances that the individual is claiming for the year and particulars in respect of each of such claims.

(iii) Declaration signed by the individual concerned that the return contains a true and correct statement of his income and other claims made.

2.7 ASSESSMENT AND COLLECTION OF TAX

The purpose of tax assessment is to determine the particular amount that a taxpayer should pay in a given tax year, while collection ensures that the amount determined is also realised. For this assessment exercise, the office of the concerned department relies on information about the payer's sources of income, the amount of income and his social responsibility.

2.8 INFORMATION FOR ASSESSMENT

At the beginning of each year of assessment each taxpayer is required to complete and deliver to the revenue division on income tax. Return form of income and claim for allowances with particulars relating to :-

(i) His income for the year whether taxable or not

(ii) Claims of deductible expenses in generating the income

(iii) Claims of personal income tax relief and allowances.

This form is required to be submitted by every taxpayer, whether he is employee, a pensioner or a person who derives his income from trade, business, vocation or profession.

2.9 WHY COMPUTER?

The main factors influencing the need for the use of computer are many and varied. Such factors that necessitated this include:-

(i) Computer has the ability to handle large volume of data that need to be processed especially in an organisation like NBEM, now NECO.

(ii) Complex calculations can be processed by computers once they are properly programmed.

(iii) Speed and ability to access data directly from remote locations.

(iv) Increased efficiency, accuracy and consistency.

(v) Computer can perform repetitive tasks without been fatigued or sick.

However, other things need to be considered for the proposed system includes:-

(i) Ensuring that the new system supports or assist the organisation performance. This can be achieved by making the design of the proposed system fit the way the organisation (NBEM) conducts it accounting procedures.

(ii) Meeting Users requirements in a way of helping users to perform appropriate procedure correctly to get accurate result as at when required.

2.10 PAY AS YOU EARN SYSTEM

Taxes are required to be deducted at sources from each incomes as dividends, rents paid by companies and emoluments of employees and pensioners. By far, the most popular of them all concerns incomes from employment or pensions from which tax is deducted through a system known as PAY-AS-YOU-EARN (PAYE).

PAYE is the name given to a system of collecting personal income tax from employees and pensioners assessment to be collected.

Under this system, the head of Revenue Section will, by advice in writing to employer, direct that when the employer makes payment of emoluments to any taxable employer, he should deduct tax there from accordance with certain guidelines.

2.11 OPERATION OF PAYE SYSTEM

PAYE applies to an employee or a pensioner in respect of weekly, monthly or annually, salaries or wages, bonus, commissions or director's fees, pensions or any form of taxable income.

PAYE is deducted at source and collected through an employer. The tax is computed by the employer through the use of the following formula:-

TOTAL PAY – RELIEF and other allowable expenses = CHARGEABLE PAY.

The Employers remit amount deducted for tax to Internal Revenue Service. Every worker is subjected to PAYE scheme and are expected to collect forms from revenue board. On the forms one will clearly state:-

(a) Annual Income

(b) Annual claim for allowances and reliefs.

When the forms are filled and returned by employers to internal revenue, they are examined and prepared ready for coding, tax officer determines the relief of free-pay allowance due to an employee by referring to his claims.

2.12 WITHHOLDING TAX (WHT)

This was introduced a few years ago by the Federal Government of Nigeria. The main thrust of its introduction was to increase the amount of tax that would accrue to revenue by widening the tax net and growth in the number of taxpayers.

To make the collection of such withheld taxes easier, government decided to appoint the employer of labour as the agent of collection. While some of these

agents had done well in the past, many were known to have abused the machinery to evade tax by wrongly describing their transaction in order to attract low rate of tax. Other abuses include refusal to withhold tax as directed.

It is in light of the various new income tax rates that this Computerised pay As you Earn (PAYE) system of taxation is structured.

2.13 TAX COLLECTION APPROACH.

The power to collect tax is always governed by law. It is necessary to understand clearly the Act of collection of personal Income Tax. All earning during each year of assessment will be subjected to tax deduction. Therefore, at the beginning of each year, each employee owes it as civic responsibility to fill a tax form (REV 49) starting his income and giving all relevant information needed by the tax office. On submission of form (REV. 49) to the board, a tax deduction card -(REV. 4M) will be issued by the PAYE section showing the total allowance income (free pay). In a situation whereby an employee did not fill / submit the prescribed form to the tax office, his employer can only allow his personal allowance, which is automatic as a relief, any other allowance a tax payer could claim can only be granted to him / her by the relevant tax authority.

They are three main important bodies that are involved in the operation of PAYE SYSTEM They are :-

(1) The Employee

(2) The Employer

(3) The Administrator

(1) The employee :- This includes any person who secured an appointment from a public / private office where remuneration is payable.

(2) The Employer:- This includes any or all of the following categories:-

(a) Any person who is having a full control of paying salaries within the country.

(b) Any paying office of any private/ public organizations.

(3) Administrator - This is the relevant tax authority.

2.14 TAX RELIEFS AND ALLOWANCES

Indeed, there were certain adjustments made to the personal income Tax over the years, which were beneficial to the collective interest of the taxpayers in the country. These were :-

(1) Increase in some allowances, particularly children and dependant

(2) Reduction in the rates of tax.

3 PROBLEMS WITH THE MANUAL OPERATION

The problems associated with the existing manual system are enumerated thus:-

(a) Complexity in computation of PAYE Scheme

(b) Lack of adequate knowledge of the Scheme, that is, after the preparing of Tax deduction card by the Internal Revenue, must officers are not able to apply the deduction formula correctly.

(c) Precious time and energy are spent even in the computation of the deduction .

(d) In sufficient payroll staff to cope with the voluminous and complex computation of PAYE Scheme.

(e) Inadequate Security for most files coupled with human errors that are associated with manual computation

(f) Misplacement of documents and files

(g) It leads to data redundancy because every year, new personal emolument card with new Tax deduction card are opened.

(h) Large volume of stationers (Bincards, Paye statements etc).

3.4 FEASIBILITY STUDY

This is the preliminary investigation stage, which helps to determine whether or not the proposed system is desirable. Therefore, it involves the study of the existing system in details in order to provide the management with vital information about the proposed system.

The main objective here is to clarify and understand the proposed system.

3.5 TESTING THE PROJECT FEASIBLITY

Testing or a review of the methods and procedures of the present project feasibility is necessary. The purpose of such test is to verify that the outlined benefits are, infact, being achieved.

(1) Operational Feasibility:- This is primary concerned with the workability of the proposed system. When developed and installed, generally what is considered is that, the project has to receive the support of the management and user.

(2) Technical Feasibility:- This seeks to clarify if the proposed can be done with the current equipment, existing software and personnel.

(3) Financial Feasibility:- This aspect is taken into consideration to access cost of implementing a proposed project along side with the benefits to be derived from implementing it.

3.6 INPUT SPECIFIATION

For Computer to perform the task of data processing, data needs to be input into it. The system input states the source and types of data that need to be supplied

into the system. This is considered important because if the information supplied are correct, definitely the result the computer will give would be right.

It is in recognition of this that the input of the proposed system is designed to produce a cost-effective method, achieve the highest level of accuracy and ensuring that the input is acceptable and understood by the users.

SPECIMEN OF EMPLOYEE DATA ITEMS:

(1) Employee name

(2) Department Number

(3) Bank code

(4) Basic salary

(5) Acting Allowance

(6) Overtime

(7) Salary arrears

(8) Gross pay

(9) Free pay

(10) Tax due

(11) Tax Refund

3.7 OUTPUT SPECIFICATION

A Computer performs its expected task internally and the result may not be produced until it is told to display them. However, output refers to the results and information that are generated by system.

Basically, the proposed system will produce two forms of reports namely- soft copy and hard copy. The soft copies are reports displayed on the computer screen, while the hard copy are those directed to the printer.

3.7 COST AND BENEFITS ANALYSIS OF THE NEW SYSTEM

(1) OPERATING COST		₦ : K
Supplies (Stationery, Diskettes, Ribbons)	-	50,000.00
Equipment Maintenance (3 months)	-	25,000.00
Program Maintenance	-	15,000.00
Labour cost (15 operators)	-	60,000.00
Utilities	-	25,000.00
3 A/C ($2^{1}/_{2}$ HP)	-	80,000.00
Stabilizers (1000KV)	-	25,000.00
Miscellaneous Expenses	-	50,000.00
		₦330,000.00

2. DEVELOPMENT COST		
System Analysis and Design for 4 weeks	-	60,000.00
Software Development	-	25,000.00

2 Printers (6L model)	-	90,000.00
5 PCS	-	350,000.00
Installations	-	30,000.00
UPS (1000 Volts)	-	30,000.00
Miscellaneous Expenses	-	25,000.00
		₦ 610,000.00
Grand Total	=	₦940,000.00

BENEFITS OF THE PROPOSED SYSTEM

(a) Reduction in the use of paper (stationeries)

(b) Sorting and arranging of information in various ways can be done easily and quickly.

(c) Automatic updating of records and maintenance

(d) Elimination of many repetitive work of bookkeeping.

(e) Readily availability of required information when needed

CHAPTER FOUR

4.0 SOFTWARE/PROGRAM DEVELOPMENT AND MAINTENANCE

4.1 INTRODUCTION

Programming is the preparation of a detailed sequence of operating instruction for particular problem to be run on a computer. It involves identification of the problem into program flowchart, testing and running the program.

In programming , input and output must be specified because the output can always be determined by the input.

4.2 CHOICE OF LANGUAGE

The proposed system is written using Database management system (DBMS). A database is an organised collection of related information designed to meet the various need of an organisation. DBMS is a package of computer programs and its documentation use to create, maintain, organise and retrieve information from a database. It is a software package that help organisations manage their data resources.

Specifically , the important functions of DBMS are :-

1. to create and populate a database.
2. Retrieve data from database.

3. Generate report from the database.

4. \Update information and organise data of the database.

4.3 FEATURES OF LANGUAGE CHOSEN:

(1) DATA INTEGRATION

In a database, information from several files is co-ordinated, accessed and operated upon as though it is in a single file Logically , the information is centralised, physically the data may be located in different file. In addition, it is possible for two or more applications to be sharing compatible data.

(2) DATA REDUNDANCY IS ELIMINATED

Data redundancy occurs when the save data appears in more than one file. This leads to wastage of storage space and duplication of efforts during data entry. One basic feature of DBMS is that it eliminates data redundancy since data are not duplicated in files.

(3) DATA INDEPENDENCE

Another feature of DBMS is that it ensures data independence because application programs are insolated physical or logical storage of data. This feature seeks to allow for changes in the content and organisation of physical data without re-programming of applications

(4) DATA INTEGRITY

This is an important features of DBMS. Since data is stored once without duplication, the information retrieve is consistent as only one update is enough if there is a change in the data.

4.4 HARDWIRE REQUIREMENTS

The proposed system requires the following:-

(a) Personal computer 836 main processor

(b) RAM 32 MB

(c) Floppy Disk Drive - 3.5/5.25

(d) Colour Monitor

(e) Laser Jet Printer (6L model)

(f) Stabilizer 500VA

(g) U.P.S 2000 V.A

4.5. SOFTWARE REQUIREMENTS

MS DOS 6.0 or above version

WINDOWS 98 VERSION

DBASE IV /FOX PRO/CLIPPER

TEXT EDITOR (MS - DOS)

4.6 STRUCTURE OF DATABASE FILES

The new system is proposed to be designed using Database management system. This requires storing the data to be used in a database file.. The design of database file defined the description of all the files that will be used in the proposed system.

The proposed computerised PAYE system for NBEM is designed to use 4 database file namely EMPLOYEE. DBF, TRANS. DBF, MAN. DBF, and MANTAIN. DBF.

(1) EMPLOYEE. DBF

S/NO	FIELDNAME	FIELD TYPE	WIDTH
1.	STAFF NO	CHARACTER	6
2.	SURNAME	CHARACTER	15
3.	ONAME	CHARACTER	20
4.	HADDR	CHARACTER	30
5.	PADDR	CHARACTER	30
6.	TOWN	CHARACTER	15
7.	NATIONALTY	CHARACTER	15
8.	SEX	CHARACTER	1
9.	MARSTAT	CHARACTER	1
10	AGE	CHARACTER	2
11.	BANK	CHARACTER	12
12	DOB	DATE	8
13.	DEPT	CHARACTER	12
14.	G-LEVEL	CHARACTER	2
15.	S.TEP	CHARACTER	2
16.	MONTH	CHARACTER	12
17.	YEAR	CHARACTER	4

(2) TRANS DBF

S/N	FIELD NAME	FIELD TYPE	WIDTH
1.	STAFF NO	CAHARACTER	6
2.	G-LEVEL	CHARACTER	2
3.	STEP	CHARACTER	2
4.	MONTH	CHARACTER	12
5.	YEAR	NUMERIC	4
6.	BASIC	NUMERIC	14
7.	TR-ALL	NUMERIC	7
8.	RENT	NUMERIC	6
9.	UL-ALL	NUMERIC	6
10.	OV-ALL	NUMERIC	6
11.	VEH. LOAN	NUMERIC	6
12.	TAX	NUMERIC	6
13.	U-RATE	NUMERIC	6

(3) MAIN. DBF

S/N	FIELD NAME	FIELD TYPE	WIDTH
1.	STAFF NO	CHARACTER	8
2.	MONTH	CHARACTER	10
3.	YEAR	NUMERIC	4
4.	BASIC	NUMERIC	14
5.	TR-ALL	NUMERIC	7
6.	RENT	NUMERIC	6
7.	UL-ALL	NUMERIC	6
8.	OV-TIME	NUMERIC	6
9.	TAX	NUMERIC	6
10.	U-DUE	NUMERIC	6
11.	G-PAY	NUMERIC	14
12.	N-PAY	NUMERIC	14
13.	T-DEDU	NUMERIC	12
14.	L-TAX	NUMERIC	14

(4) MONTHS. DBF

S/N	FIELD NAME	FIELD TYPE	WIDTH
1.	STAFF NAME	CHARACTER	8
2.	JAN	NUMERIC	12
3.	FEB	NUMERIC	12
4.	MAR	NUMERIC	12
5.	APR	NUMERIC	12
6.	MAY	NUMERIC	12
7.	JUN	NUMERIC	12
8.	JUL	NUMERIC	12
9.	AUG	NUMERIC	12
10.	SEP	NUMERIC	12
11.	OCT	NUMERIC	12
12.	NOV	NUMERIC	12
13.	DEC	NUMERIC	12
14.	IC-TAX	NUMERIC	14
15.	C-TAX	NUMERIC	14
16.	ST	CHARACTER	6

4.7 CHANGEOVER PROCEDURE/SYSTEM CONVERSION

The following approaches / procedures could be used during conversion:-

(1) The parralled method:- This is a method whereby the old method is operated simultaneously for sometime with the new system to make sure that the new system meets the requirements that the old system has been meeting all along and to determine whether the new system will be able to stand the test of time.

(2) Direct Method:- This is a method where the old system is discontinued and the new system becomes operational immediately.

(3) Piecemeal Method:- This is a method whereby changing to a system is done gradually until the desired result is installed. In other parts of the organisation gradually

4.8 MAINTENANCE

Once a system is implemented and is in full operation. It is examined to see if it has meet the objectives set out in the original specification or design. From time to time, the requirements of the organisation will change to see if it can cope with the changes experienced.

4.9 MODIFICATION AND REVIEW

The new system will need to be modified periodically due to the following reasons

(a) To deal with unforeseen problems arising from operation

(b) To ensure that the system is able to cope with the changing requirements of the organisation's activities.

4.10 STAFF TRAINING

The amount and period of training for this system will depend upon its complexity and the available skill on the ground presently.

The proposed system will be Users - Friendly. However, it is necessary to have an In-house training for the various personnel in the organisation.

The training will cover areas like Basic Computing and operation guidelines for the account staff in general. This training should not exceed four weeks of the designed packages.

4.11 STARTING THE SYSTEM

Step 1

To start the system, simply type CD\PROJECT where PROJECT is the name of the Directory you have created.

Step 2

Type Dbase for DbaseIV to load, while Dbase is running at Dot Prompt Type "MAINPRG" (MAINPRG is the name of the Compterised Pay As You Earn Program designed to solve your problem.

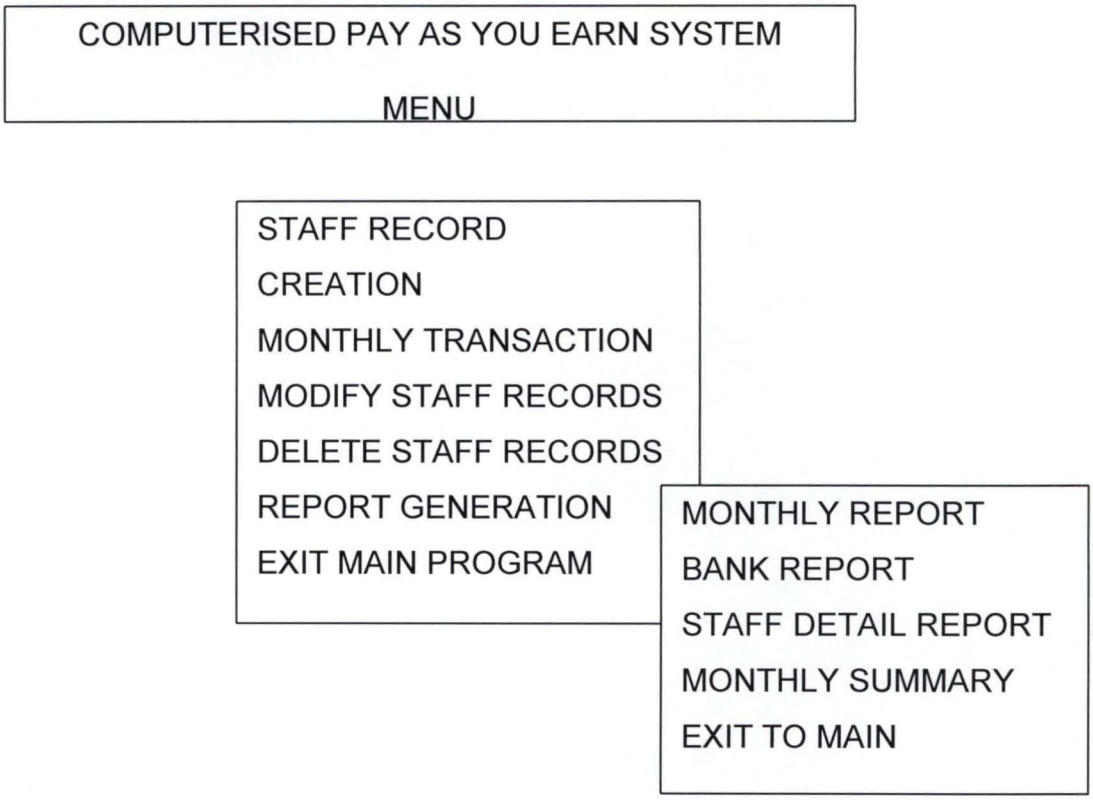
Step 3

Follow the instructions on the screen to complete your task.

4.12 **DESCRIPTION OF THE MEMU STRUCTURE**

COMPUTERISED PAY AS YOU EARN SYSTEM MENU

STAFF RECORD CREATION MONTHLY TRANSACTION MODIFY STAFF RECORDS DELETE STAFF RECORDS REPORT GENERATION EXIT MAIN PROGRAM


COMPUTERISED PAY AS YOU EARN SYSTEM
MENU
STAFF RECORD
CREATION
MONTHLY TRANSACTION
MODIFY STAFF RECORDS
DELETE STAFF RECORDS
REPORT GENERATION
EXIT MAIN PROGRAM
MONTHLY REPORT
BANK REPORT
STAFF DETAIL REPORT
MONTHLY SUMMARY
EXIT TO MAIN

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

Computerization in any organization is carried out with the hope of eliminating or reducing to certain minimum level the application or use of manual method in carrying out its activities.

It is also done with the sole aim of improving the speed, accuracy and efficiency in collection, manipulation, storage, reporting and dissemination of data.

Computerization of National Board for Educational Measurement (NBEM) paye account is aimed at eliminating most of the manual work involved in book keeping of the organization.

Indeed, with automation, reports can be generated in good time, thus enabling the organization staff, particularly the management to fake quick decision over its financial obligations.

RECOMMENDATIONS

Despite the huge advantages to be achieved in using this system. It is equally worthwhile to recommend thus:-

(a) The organization will urgently need to network all its activities.

(b) The designed software can be further enhanced either by using the same language or any other language adequate enough to be used to solve problems that might be required.

(c) It is highly recommended that all staff should be computer-literate.

(d) The organization should endeavour to procure more computer systems to enable every one have access to its usage.

It is indeed strongly recommended that this new method of storing, gathering, manipulating and calculating PAYE be fully developed to replace the manual method which still account for the bulk of clerical paper work in most organizations.

The package is hereby strongly recommended for other organizations that are yet to computerize their PAYE system.

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```
*********************************************************
*This section Accepts Data into the personnel file  **
*********************************************************
save screen to mmp
set talk off
set status off
set score off
set date british
set bell off
set color to gr+,,b
set color to wg/rB
sele a
use bank index bank
J = 0
Do while J <= 24
  @ J,0 Say Replicate(CHR(179),80)
  J =  J + 1
enddo
store space(5) to mnum
set color to GR/WN
@0,0 CLEAR TO 2,79
@1,1 SAY "COMPUTER  APPROACH  TO  PAY-AS-YOU  EARN  (PAYE)  SYSTEM  IN
Store "Y" to Ans
Do While upper(AnS) = "Y"
   store space(25) to Mname
   store space(20) to maddr
   store space(10) to mdept
   store space(15) to mpost
   store space(5) to mquali,mstnum
   store space(10) to mstate
   store space(10) to mnation
   store space(2) to mlevel,mstep,mbcode
   store CTOD("  /  /  ") to MD_BIRTH
   store 0 to mnpay, mhouse, mtrans, MWATER,mbasic
   store ctod("  /  /  ") to mDatep
   store space(8) to mstatus, mnation
   store space(1) to msex
   set color to w/b
   @7,4 clear to 22,75
   @7,4 to 22,75 chr(178)
   @ 6,25 say " Data Entry Section into personel file" Color *W
   @9,5 say "Enter Staff's Name " Get Mname
   @9,52 say "Staff's No" Get Mstnum pict "99999"
   @11,05 say "Residential address" get Maddr
   @11,46 say "Department :-" Get mdept
   @13,05 say "Enter Staff's level" get mlevel
   @13,43 say "Enter Staff's Step :-" Get mstep
   @15,05 say "Position              " get mpost
   @15,43 say "State of Origin " get mstate
   @17,05 say "Date of Birth    " get MD_BIRTH
   @17,34 say "Date of Appoint." get mDatep
   @17,62 say "Sex" get msex pict "!" valid msex $ "FM"
   @19,05 say "Nationality      " get mnation
   @19,36 say "Basic Salary" get mbasic pict "9999999.99"
   do while .t.
     @19,60 say "Bank Code: "get mbcode
     @20,5 to 20,74 color gr+/b
     read
     if lastkey() = 27
       clear
       rest screen from mmp
       return
     endif
    sele a
```

```
    seek mbcode
    if .not. found()
      @21,20 say "Bank Code does not Exist"
      m =inkey(0)
      @21,20 clear to 21,67
      loop
     endif
     exit
   Enddo
   save screen to mty
   mhouse =(.70*mbasic)
   if val(mlevel)<=5
      mtrans =800
      mmeal =300
      mutility =190
   Endif
   if val(mlevel)>=6 .and. val(mlevel) <=11
      mtrans =1030
      mmeal =400
      mutility =310
   Endif
   if val(mlevel)>=12 .and. val(mlevel) <=15
      mtrans =1400
      mmeal =500
      mutility =500
   Endif
   Use Personel
   Append Blank
   Repl Name with mname, Address with maddr
   Repl Emp_no with mstnum
   Repl Dept with mdept
   Repl Position with mpost
   if val(level)=13
      menter =350
      Repl Entert with menter
   Endif
   if val(level)>=14 .and. val(level) <=15
      menter =450
      Repl Entert with menter
   Endif
   Repl state with mstate
   Repl Trans with mtrans
   Repl Level with mlevel
   Repl Basic with mBasic
   Repl meal with mmeal
   Repl House with mhouse
   Repl Utility with mutility
   Repl Date_b with md_birth, Date_emp with Date()
   Repl bcode with mbcode
   Repl Sex with msex, Nation with mnation
   @21,25 Say "More data entry(Y/N)" get ANS pict "!" valid ans $ "YN"
   Read
   if lastkey() =27
      clear
      rest screen from mmp
      return
   endif
   rest screen from mty
ENDDO
Clear
@ 10,20 Say "Goodbye for now & God's blessing"
Wait +space(20)+"Press any key to continue..."
CLEAR
******end of prg*******
```

```
SET STATUS OFF
SET SCORE OFF
SET TALK OFF
SET BELL OFF
CLEAR
STORE 0 TO TY
@10,20 SAY " ENTER STAFF NUM." GET TY
READ
CLEAR
USE PAY_REC
INDEX ON EMP_NO TO PP
SEEK TY
IF FOUND()
@1,20 SAY "I N D I V I D U A L    P A Y S L I P"
@2,1 TO 19,70 CHR(178)
@4,20 SAY "NAZARETH VENTURES LIMITED"
@5,27 SAY "NOVEMBER, 1997"
@7,3 SAY "STAFF_N0 :-"
@7,15 SAY EMP_NO
@7,25 SAY "NAME :-"
@7,35 SAY  NAME
@7,45 SAY "DEPARTMENT :-"
@7,60 SAY DEPT
@8,2 TO 8,69
@12,3 say "TOTAL DEDUCTION:-"
STORE (HOUSE + TRANSP + WATER ) TO TOTA_ALL
@13,13 SAY TAX PICT "99999.99"
@10,46 SAY "ALLOWANCES :-"
@11,49 SAY "HOUSING ALL. :-"
@11,63 SAY HOUSE
@12,49 SAY "TRANSP.ALL . :-"
@12,63 SAY TRANSP
@13,49 SAY "WATER ALL. :-"
@13,63 SAY WATER
@15,49 SAY "TOTAL ALL.:-"
@15,60 SAY TOTA_ALL PICT "999999.99"
@16,2 TO 16,69
@18,30 SAY "NETPAY...."
@18,46 SAY NPAY
ELSE
RETURN
ENDIF
@20,00
WAIT "  "
*-----------MAIN PROGRAME-------------------------
SET TALK OFF
SET CONF OFF
SET DEVICE TO SCREEN
SET ESCA OFF
SET SAFE OFF
SET STAT OFF
SET SCORE OFF
SET CENT ON
release all
SET COLOR OF MESSAGE TO B/W+
SET COLOR OF TITLE TO W/GB
SET COLOR OF HIGHLIGHT TO GR/R+
SET COLOR OF BOX TO GR+/BG
*-----------------MENU HEADING PROCEDURE-----------------
@2,13 TO 6,60 CHR(220)
@4,15 SAY "   COMPUTERISED PAY AS YOU EARN SYSTEM"
@5,15 SAY "               MENU                " COLO GB*/B
@1,0 TO 23,73 DOUB
DEFINE POPUP PAY FROM 8,24 TO 16,49 ;
```

```
MESSAGE "USE UP $ DOWN KEYS"
DEFINE BAR 1 OF PAY PROMPT "STAFF RECORD CREATION" ;
  MESSAGE "TO ADD MORE RECORD TO THE PERSONEL FILE"
DEFINE BAR 2 OF PAY PROMPT "MONTHLY TRANSACTION" ;
  MESSAGE "TO CALCULATE SALARY FOR THE MONTH"
DEFINE BAR 3 OF PAY PROMPT "MODIFY STAFF RECORDS" ;
  MESSAGE "THIS OPTION MODIFIES STAFF RECORDS"
DEFINE BAR 4 OF PAY PROMPT "DELETE STAFF RECORDS" ;
  MESSAGE "TO DELETE STAFF INFORMATION THE FILE"
DEFINE BAR 5 OF PAY PROMPT "REPORT GENERATION" ;
  MESSAGE "TO CREATE MONTHLY REPORTS"
DEFINE BAR 6 OF PAY PROMPT "EXIT MAIN PROGRAM" ;
  MESSAGE "TO GET OUT OF THE PROGRAM"
ON SELECTION POPUP PAY DO MAINREC
ACTIVATE POPUP PAY
save screen to mmp
PROCEDURE MAINREC
  DO CASE
  CASE BAR() = 1
    DO PERSONEL
  CASE BAR() = 2
    DO TRANS
  CASE BAR() = 3
    DO MODIREC
  CASE BAR() = 4
    DO DELREC
  CASE BAR() = 5
    DO REPT
  CASE BAR() = 6
    DEACTIVATE POPUP
    OTHERWISE
     @20,10 SAY "WRONG OPTION"
       WAIT
 ENDCASE
 DEACTIVATE POPUP
 SET COLO TO W/B
RETURN

PROCEDURE REPT
DEFINE POPUP REP FROM 12,49 TO 18,70 ;
MESSAGE "USE UP $ DOWN KEYS"
DEFINE BAR 1 OF REP PROMPT "MONTHLY REPORT" ;
  MESSAGE "THIS GENERATE MONTLY TRANSACTION REPORT"
DEFINE BAR 2 OF REP PROMPT "BANK REPORT" ;
  MESSAGE "GENERATE REPORT FOR DIFERENT BANKS"
DEFINE BAR 3 OF REP PROMPT "STAFF DETAIL REPORT" ;
  MESSAGE "DETAIL REPORT FOR ALL STAFF"
DEFINE BAR 4 OF REP PROMPT "MONTHLY SUMMARY" ;
  MESSAGE "SUMMARY REPORT FOR ALL STAFF"
DEFINE BAR 5 OF REP PROMPT "EXIT TO MAIN" ;
  MESSAGE "GO BACK TO THE MAINMENU"
ON SELECTION POPUP REP DO MAINREP
ACTIVATE POPUP REP
save screen to mp
PROCEDURE MAINREP
  DO CASE
  CASE BAR() = 1
    DO MREPT
  CASE BAR() = 2
    DO BREPT
  CASE BAR() = 3
    DO SREPT
  CASE BAR() = 4
   * DO SUMREPT
```

```
  CASE BAR() = 5
    DEACTIVATE POPUP
    rest screen from mmp
    RETURN
    OTHERWISE
     @20,10 SAY "WRONG OPTION"
       WAIT
 ENDCASE
* DEACTIVATE POPUP
 SET COLO TO W/B
RETURN
****************************
*   Monthly Transaction    *
****************************
set talk off
set safety off
set score off
set status off
close all
clear
set color to w/b
clear
set color to gr+,,g+
store space(3) to mmoth
set color to gr+/w
@9,19 clear to 15,55
@9,19 to 15,55
set cursor off
@14,20 say "Use space Bar to Select your Choice"
@10,20 say "Enter the Month to Process :" get mmoth pict "@M Jan,Feb,M
    Sep,Oct,Nov,Dec"
read
set cursor on
if lastkey() =27
   set color to w/b
   clear
   return
Endif
sele a
use personel
sele b
use trans index trans
seek mmoth
if found() .and. year(date()) =Year
  clear
  @10,10 say "Illegal Action, Salary for the Month of  "+mmoth +"has b
  wait +space(20)+ "Press any key to continue..."
  return
Endif
J = 0
Do while J <= 24
@ J,0 Say Replicate(CHR(179),80)
J =  J + 1
enddo
store space(4) to mnum
set color to GR/WN
@0,0 CLEAR TO 2,79
@1,1 SAY "COMPUTER  APPROACH  TO  PAY-AS-YOU  EARN  (PAYE)  SYSTEM  IN
*use personel
sele a
go top
do while .not. eof()
   set color to w/b
   @5,4 clear to 22,75
```

```
@5,4 to 22,75 chr(178)
@7,5 say "Staff's Name "
@7,21 say Name color gr+/b
@7,52 say "Staff's No"
@7,63 say Emp_no pict "99999" color gr+/b
@9,05 say "Resident. addr."
@9,21 say address color gr+/b
@9,43 say "Department :-"
@9,63 say dept color gr+/b
@11,05 say "Staff's level"
@11,21 say level color gr+/b
@11,43 say "Staff's Step :-"
@11,63 say step color gr+/b
@13,05 say "Position "
@13,21 say position color gr+/b
@13,43 say "State of Origin "
@13,63 say state color gr+/b
@15,05 say "Date of Birth  "
@15,21 say Date_B color gr+/b
@15,34 say "Date of Appoint."
@15,50 say Date_emp color gr+/b
@15,62 say "Sex"
@15,66 say sex  color gr+/b
@17,05 say "Nationality  "
@17,21 say nation color gr+/b
@17,36 say "Basic Salary"
@17,47 say basic pict "99,999.99" color gr+/b
@17,60 say "Bank Code :"
@17,70 say bcode color gr+/b
@18,5 to 18,74 color gr+/b
@20,6 say "Press Enter to countinue or Esc to Abort or F2 to cal. O
@20,34 say "Esc" color gr+/b
@20,50 say "F2" color gr+/b
rep =inkey(0)
if rep =27
  clear
  return
Endif
if rep =13
  mtax =.05*basic
endif
if rep =-1
   mover =0
   mtax =.05*basic
   @21,20 say "Number of hours worked " get mover
   read
   ovt =(mover/12)*30
 endif
 sele b
 append blank
 repl Emp_no with a->emp_no
 repl Name with a->name
 repl Entert with a->entert
 repl Meal with a->meal
 repl Level with a->level
 repl Step with a->step
 repl Basic with a->Basic
 repl House with a->house
 repl Trans with a->Trans
 repl Utility with a->Utility
 repl bcode with a->bcode
 repl Grosspay with (entert+meal+basic+house+trans+Utility)
 if rep =-1
    repl Overtime with ovt
```

```
      repl Grosspay with (entert+meal+basic+house+trans+Utility+ovt)
    Endif
    repl Tax with mtax
    repl Netpay with (Grosspay-mtax)
    repl month with mmoth
    repl year with year(date())
    sele a
    skip
 Enddo
 clear
 @10,20 say "End of File Encountered !"
 wait +space(20)+"press any key to exit.."
 clear
 return


*********************************************************
*This section Modifies Data in the personnel file   **
*********************************************************
set talk off
set status off
set score off
set date british
set bell off
set color to gr+,,b
set color to w/B
Store "Y" to Ans
Do While upper(AnS) = "Y"
   store space(5) to mnum
   J = 0
   Do while J <= 24
      @ J,0 Say Replicate(CHR(179),80)
      J =  J + 1
   enddo
   @0,0 CLEAR TO 2,79
   @1,1 SAY "COMPUTER  APPROACH  TO  PAY-AS-YOU  EARN  (PAYE)  SYSTEM
   save screen to mmi
   @8,24 clear to 12,49
   @10,24 say "Enter Staff Number :" get mnum
   read
   save screen to ty1
   rest screen from mmi
   if lastkey() =27
      clear
      return
   endif
   use personel index personel
   seek mnum
   if .not. found()
     clear
     @10,20 say "Staff Number does not exit"
     wait +space(20)+"Press any key to continue..."
     return
   endif
   set color to w/b
   @7,4 clear to 22,75
   @7,4 to 22,75 chr(178)
   @ 6,20 say "Data Deletion from the personel file" Color *W
   @8,5 say "Staff's Name "
   @8,21 say Name color gr+/b
   @8,52 say "Staff's No"
   @8,63 say Emp_no pict "99999" color gr+/b
   @10,05 say "Resident. addr."
```

```
   @10,21 say address color gr+/b
   @10,43 say "Department :-"
   @10,63 say dept color gr+/b
   @12,05 say "Staff's level"
   @12,21 say level color gr+/b
   @12,43 say "Staff's Step :-"
   @12,63 say step color gr+/b
   @14,05 say "Position "
   @14,21 say position color gr+/b
   @14,43 say "State of Origin "
   @14,63 say state color gr+/b
   @16,05 say "Date of Birth  "
   @16,21 say Date_B color gr+/b
   @16,34 say "Date of Appoint."
   @16,50 say Date_emp color gr+/b
   @16,62 say "Sex"
   @16,66 say sex  color gr+/b
   @18,05 say "Nationality  "
   @18,21 say nation color gr+/b
   @18,43 say "Basic Salary"
   @18,63 say basic pict "99,999.99" color gr+/b
   store space(1) to tty
   @19,5 to 19,74
   @20,20  say "Are you sure you want to Delete this record(Y/N)" get
   read
   @20,20 clear to 20,70
   if lastkey() =27
      clear
      return
   endif
   if tty ="Y"
     delete
     pack
   endif
   @20,20 Say "Do you want to Delete more records record(Y/N)" get ANS
   Read
   if lastkey() =27
      clear
      return
   endif
   rest screen from ty1
ENDDO
Clear
@ 10,20 Say "Goodbye for now & God's blessing"
Wait +space(20)+"Press any key to continue..."
CLEAR

******end of prg*******


*******************************************************
*This section Modifies Data in the personnel file   **
*******************************************************
set talk off
set status off
set score off
set date british
set bell off
set color to gr+,,b
set color to w/B
Store "Y" to Ans
Do While upper(AnS) = "Y"
   store space(5) to mnum
   J = 0
```

```
Do while J <= 24
   @ J,0 Say Replicate(CHR(179),80)
   J =  J + 1
enddo
@0,0 CLEAR TO 2,79
@1,1 SAY "COMPUTER  APPROACH  TO  PAY-AS-YOU  EARN  (PAYE)  SYSTEM
save screen to mmi
@8,24 clear to 12,49
@10,24 say "Enter Staff Number :" get mnum
read
save screen to ty1
rest screen from mmi
if lastkey() =27
   clear
   return
endif
use personel index personel
seek mnum
if .not. found()
  clear
  @10,20 say "Staff Number does not exit"
  wait +space(20)+"Press any key to continue..."
  return
endif
Store Name to mname
Store Address to maddr
Store Emp_no to mstnum
Store Dept to mdept
Store Position to mpost
Store entert to mentert
Store state to mstate
Store step to mstep
Store Trans to mtrans
Store Level to mlevel
Store Basic to mBasic
Store bcode to mbcode
Store meal to mmeal
Store House to mhouse
Store Utility to mutility
Store Date_b to md_birth
Store date_emp to mdatep
Store Sex to msex
Store Nation to mnation
set color to w/b
@7,4 clear to 22,75
@7,4 to 22,75 chr(178)
@ 6,20 say "Data Modification Section in personel file" Color *W
@9,5 say "Enter Staff's Name " Get Mname
@9,52 say "Staff's No" Get Mstnum pict "99999"
@11,05 say "Residential address" get Maddr
@11,43 say "Department :-" Get mdept
@13,05 say "Enter Staff's level" get mlevel
@13,43 say "Enter Staff's Step :-" Get mstep
@15,05 say "Position             " get mpost
@15,43 say "State of Origin " get mstate
@17,05 say "Date of Birth    " get MD_BIRTH
@17,34 say "Date of Appoint." get mDatep
@17,62 say "Sex" get msex pict "!" valid msex $ "FM"
@19,05 say "Nationality      " get mnation
@19,36 say "Basic Salary" get mbasic pict "9999999.99"
@19,60 say "Bank Code :" get mbcode
@20,5 to 20,74 color gr+/b
read
if lastkey() = 27
```

```
        clear
        return
    endif
    save screen to mty
    mhouse =(.70*mbasic)
    if val(level)<=5
       mtrans =800
       mmeal =300
       mutility =190
    Endif
    if val(level)>=6 .and. val(level) <=11
       mtrans =1030
       mmeal =400
       mutility =310
    Endif
    if val(level)>=12 .and. val(level) <=15
       mtrans =1400
       mmeal =500
       mutility =500
    Endif
    Use Personel
    Repl Name with mname, Address with maddr
    Repl Emp_no with mstnum
    Repl Dept with mdept
    Repl Position with mpost
    if val(level)=13
       menter =350
       Repl Entert with menter
    Endif
    if val(level)>=14 .and. val(level) <=15
       menter =450
       Repl Entert with menter
    Endif
    Repl state with mstate
    Repl Trans with mtrans
    Repl Level with mlevel
    Repl Basic with mBasic
    Repl meal with mmeal
    Repl House with mhouse
    Repl Utility with mutility
    Repl Date_b with md_birth
    Repl Sex with msex, Nation with mnation
    Repl bcode with mbcode
    @21,25 Say "More data to Modify(Y/N)" get ANS pict "!" valid ans $
    Read
    if lastkey() =27
       clear
       return
    endif
    clear
    rest screen from ty1
ENDDO
Clear
@ 10,20 Say "Goodbye for now & God's blessing"
Wait +space(20)+"Press any key to continue..."
CLEAR

******end of prg*******
*************************************************
*** This Section will produce montly Salary report *
*************************************************
set safety off
set talk off
clear
```

```
i =1
m=8
set device to screen
store space(3) to mmoth
store 0 to myear
set cursor off
@9,19 to 15,55
@14,20 say "Use space Bar to Select your Choice"
@10,20 say "Enter the Month to Display :" get mmoth pict "@M Jan,Feb,M
    Sep,Oct,Nov,Dec"
set cursor on
@12,20 say "Enter the Year to Display :" get myear pict "9999"
read
store 0 to mbasic,mutility,mmeal,mtrans,mhouse,mgross,mnetpay
set device to file "tt.txt"
do head
use trans
do while .not. eof()
  if month =mmoth .and. year =myear
     @m,2 say i pict "999"
     @m,8 say emp_no
     @m,19 say Name
     @m,45 say Basic
     @m,55 say Utility
     @m,62 say Meal
     @m,75 say Trans
     @m,85 say House
     @m,95 say GrossPay
     @m,107 say NetPay
     mbasic =mbasic+basic
     mutility =mutility+utility
     mmeal=mmeal+meal
     mhouse =mhouse+house
     mtrans=mtrans+trans
     mgross=mgross+Grosspay
     mnetpay =mnetpay+netpay
     skip
     m= m+1
     i =i+1
    else
    skip
  Endif
Enddo
@m+1,2 say replicate("-",114)
@m+2,40 say mbasic pict "999,999.99"
@m+2,51 say mutility pict "999,999.99"
@m+2,62 say mmeal pict "999,999.99"
@m+2,75 say mtrans pict "999,999.99"
@m+2,85 say mhouse pict "999,999.99"
@m+2,95 say mgross pict "999,999.99"
@m+2,107 say mnetpay pict "999,999.99"
@m+3,2 say replicate("-",114)
set device to screen
!edit tt.txt
CLEAR
RETURN
procedure head
  @2,(114-30)/2 say "NATIONAL EXAMINATIONS COUNCIL"
  @3,(114-34)/2 say "MONTHLY SALARY FOR THE MONTH OF "
  @4,(114-34)/2 say "----------------------------------------"
  @6,2 say "S/No"
  @6,8 say "Staff No"
  @6,19 say "Name of Staff"
  @6,45 say "Basic"
```

```
  @6,55 say "Utility"
  @6,65 say "Meal"
  @6,75 say "Trans"
  @6,85 say "Housing"
  @6,95 say "Gross Pay"
  @6,107 say "Net Pay"
  @7,2 say replicate("-",114)
return

 Do while .not. eof()
   if (&field1 = "NR" .or. &field1 = "  ").or. (session <>msess)
      skip
      else
      store matric to mmm1
      sele e
      seek mmm1
      store name to mname
      if mSem ="First" .or. mSem ="Second"
         sele a
      Endif
      if mSem ="Third" .or. mSem ="Fourth"
         sele b
      Endif
      @m-1,3 say "├──────────┼──────────────────┼──────────────────────────────
      @m,3 say "│ "
      @m,5 say I pict "9999"
      @m,12 say "│ "+ Matric
      @m,30 say "│ "+mname
      @m,57 say "│ "
      @m,68 say "│"
      i = i+1
      p = p+1
      skip
      m = m+2
      if p >=60  .or. eof()
         @m-1,3 say "└──────────┴──────────────────┴──────────────────────────────
         if !eof()
            do headg
         endif
      endif
    endif
    if mSem ="First" .or. mSem ="Second"
      sele a
    Endif
    if mSem ="Third" .or. mSem ="Fourth"
      sele b
    Endif
  enddo
return
procedure headg
p =1
m =10
   kk = int((80-len(headd))/2)
   @2,25 say "THE FEDERAL POLYTECHNIC, BIDA"
   @3,kk say headd
   @4,22 say "Examination Score Sheet  on  "+ltrim(msco)
   @5,22 say "=================================="
   @7,3  say"┌──────────┬──────────────────┬──────────────────────────────┐
   @8,3 say "│ S/No    │  Matric Num      │    Names of Candidate      │
return

*****************************************************
*** This Section will produce montly Salary report *
*****************************************************
```

```
set safety off
set talk off
close all
clear
i =1
m=8
set device to screen
store space(3) to mmoth
store 0 to myear
set cursor off
@9,19 to 15,55
@14,20 say "Use space Bar to Select your Choice"
@10,20 say "Enter the Month to Display :" get mmoth pict "@M Jan,Feb,M
    Sep,Oct,Nov,Dec"
set cursor on
@12,20 say "Enter the Year to Display :" get myear pict "9999"
read
store 0 to mbasic,mutility,mmeal,mtrans,mhouse,mgross,mnetpay
set device to file "tt.txt"
do head
use trans
do while .not. eof()
  if month =mmoth .and. year =myear
     @m,2 say i pict "999"
     @m,8 say emp_no
     @m,19 say Name
     @m,45 say Basic
     @m,55 say Utility
     @m,62 say Meal
     @m,75 say Trans
     @m,85 say House
     @m,95 say GrossPay
     @m,107 say NetPay
     mbasic =mbasic+basic
     mutility =mutility+utility
     mmeal=mmeal+meal
     mhouse =mhouse+house
     mtrans=mtrans+trans
     mgross=mgross+Grosspay
     mnetpay =mnetpay+netpay
     skip
     m= m+1
     i =i+1
    else
    skip
  Endif
Enddo
@m+1,2 say replicate("-",114)
@m+2,40 say mbasic pict "999,999.99"
@m+2,51 say mutility pict "999,999.99"
@m+2,62 say mmeal pict "999,999.99"
@m+2,75 say mtrans pict "999,999.99"
@m+2,85 say mhouse pict "999,999.99"
@m+2,95 say mgross pict "999,999.99"
@m+2,107 say mnetpay pict "999,999.99"
@m+3,2 say replicate("-",114)
set device to screen
!edit tt.txt
CLEAR
rest screen from mp
RETURN
procedure head
  @2,(114-30)/2 say "NATIONAL EXAMINATIONS COUNCIL"
  @3,(114-34)/2 say "MONTHLY SALARY FOR THE MONTH OF "+mmoth +" "+str(
```

```
  @4,(114-34)/2 say "----------------------------------------"
  @6,2 say "S/No"
  @6,8 say "Staff No"
  @6,19 say "Name of Staff"
  @6,45 say "Basic"
  @6,55 say "Utility"
  @6,65 say "Meal"
  @6,75 say "Trans"
  @6,85 say "Housing"
  @6,95 say "Gross Pay"
  @6,107 say "Net Pay"
  @7,2 say replicate("-",114)
return
*****************************************************
*** This Section will produce Bank report        ***
*****************************************************
set safety off
set talk off
clear
i =1
m=9
set device to screen
store space(3) to mmoth
store 0 to myear
store space(2) to mcode
@9,19 to 15,55
@10,20 say "Enter the Month to Display :" get mmoth pict "@M Jan,Feb,M
    Sep,Oct,Nov,Dec"
@12,20 say "Enter the Year to Display :" get myear pict "9999"
@14,20 say "Enter Bank Code :" get mcode pict "99"
read
use bank index bank
seek mcode
if .not. found()
 clear
 @10,20 say "Bank Code does not exist"
 wait +space(20)+"Press any Key to continue.."
 return
Endif
store descript to mdes
store 0 to mnetpay
set device to file "tt.txt"
do head
use trans
do while .not. eof()
  if month =mmoth .and. year =myear .and. bcode =mcode
     @m,2 say i pict "999"
     @m,9 say Name
     @m,35 say NetPay
     mnetpay =mnetpay+netpay
     skip
     m= m+1
     i =i+1
    else
    skip
  Endif
Enddo
@m+1,2 say replicate("-",48)
@m+2,33 say mnetpay pict "999,999.99"
@m+3,2 say replicate("-",48)
set device to screen
!edit tt.txt
procedure head
  @2,15 say "NATIONAL EXAMINATIONS COUNCIL"
```

```
  @3,6 say "MONTHLY BANK REPORT FOR THE MONTH OF  " +mmoth+ " "+ltrim(
  @4,20 say uppe(mdes)
  @5,10 say "----------------------------------------"
  @7,2 say "S/No"
  @7,9 say "Name of Staff"
  @7,35 say "Amount Payable"
  @8,2 say replicate("-",48)
return
```

NATIONAL EXAMINATIONS COUNCIL
MONTHLY BANK REPORT FOR THE MONTH OF Mar 2000
FIRST BANK, MINNA

S/No	Name of Staff	Amount Payable
1	Usioboh Goddy Oseagwina	9990.00
2	Julius Usifoh	6690.00
		16,680.00

NATIONAL EXAMINATIONS COUNCIL
MONTHLY SALARY FOR THE MONTH OF Mar. 2000

S/No	Staff No	Name of Staff	Basic	Utility	Meal	Trans	Housing	Gross Pay	Net Pay
1	455	Usioboh Goddy Oseagwina	5000.00	310.00	400.00	1030.0	3500.0	10240.00	9990.00
2	456	Okosun Andrew Bodmas	6000.00	310.00	400.00	1030.0	4200.0	11940.00	11640.00
3	457	Julius Usifoh	3000.00	310.00	400.00	1030.0	2100.0	6840.00	6690.00
4	509	Segun Odegbami	3400.00	310.00	400.00	1030.0	2380.0	7520.00	7350.00
			17,400.00	1,240.00	1,600.00	4,120.00	12,180.00	36,540.00	35,670.00