THE COMPUTERISATION OF STOCK/INVENTORY CONTROL SYSTEM IN INTERCITY BANK PLC CORPORATE HEAD OFFICE, KADUNA.

BY

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A PROJECT SUBMITTED TO THE DEPARTMENT OF MATHS/COMPUTER SCIENCE IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF POST GRADUATE DIPLOMA IN COMPUTER SCIENCE OF THE FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA, NIGER STATE.

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CERTIFICATION

This is to certify that MOHAMMED DANJUMA ALI of POST GRADUATE STUDIES, FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA has conducted a research on "The Computerisation of Stock/Inventory Control System in Intercity Bank Plc Head Office, Kaduna supervised by Mr. Ezeako.

01/01/2008

Student's Signature and date

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EXTERNAL EXAMINER

DEDICATION

This project is dedicated to my lovely wife and two kids - Abubakar Sadiq and Aisha.

ACKNOWLEDGEMENT

I hereby recognised the contributions of the following that have made the completion of this project possible; my able Supervisor - Mr. Ezeako for his untiring support in the planning and execution of this project; our Course Coordinator - Prince Badmus, Head of Department and other Departmental Lecturers.

I am very grateful to my loving parents for their encouragement. Also worthy of mention are my beloved wife Fatima Danjuma Aliyu and my Two kids - Sadiq and Aisha for their understanding also my Brothers and Sisters inclusive.

This acknowledgement will not be completed without recognising the rapport I enjoyed with my colleagues both in my place of work and school who have contributed to the success of this research project.

Finally, above all I am most appreciative of the infinite mercy of the Almighty Allah for giving me the well-being throughout this academic pursuit.

ABSTRACT

This study is designed to find how stock/inventory control can be computerised in an organisation and the staff who are charged with the responsibility of providing a firm program of stock control.

The stock control program is written for those who have little or vast knowledge about programming. The Software used is dBase III plus (a name that has come as a solution to the data management of any organisation) and also a Software which enhances the understanding of the User.

The program focuses on "Stock/Inventory Control" of any organisation; especially that of Intercity Bank Plc Corporate Head Office, Kaduna; The programming is done in such a way that it could be adjusted at any point in time to suit any other set-up that may wish to use it, due to the fact that materials or stock items vary from one organisation to another.

The approach has been designed for independent study as well as group of persons wishing to carry out research work on the same topic. However, the simplified and standardized format of the programme shows its dynamic adaptability.

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CHAPTER ONE

INTRODUCTION

Stock Control and re-ordering is a problem found in many organisations. Computer programs could be written to record items of each type of stock removed from stores record quantities of new purchased items from the suppliers, check the level of stock to see if the quantities have fallen below a critical level (and if so generate an order to the supplier); and many other associated tasks. The files holding records of items (stock) in the computer could be updated by running the programs for update on hourly, daily or even weekly basis.

1.1 WHAT IS STOCK CONTROL

For any organisation to carry out its activities in a standard fashion, it must have stock, therefore stock control can be defined as the process of ensuring that the stock held by the operation that require items (i.e. production, distribution, sales etc), bearing in mind the factors of time, location, quantity, quality and cost. On the other hand, stock can be referred to as the quantity of goods (stock) in custody (stores) of any organisation for the smooth running of the organisation. This should not be confused with assets in the sense that stock can be consumables of the organisation while assets are the organisation property.

For instance, in a manufacturing company, the raw materials with which they produce their goods and store the finished products for sale to clients are also stock. In a trading company, the goods stored for sale to customers are their stock. This cannot be compared with company's machines or office furniture (except if the company buys and sells the machines or office furniture).

1.2 WHAT IS A COMPUTER

The development of the role of the computer stores management has led to increased attention being paid to store codes. Computer Operations are greatly assisted by the use of a logical coding system. Because of the logical way in which computer operates, they are able to identify the item in question quickly, once given its code number.

Other advantages of stores coding in relation to computer systems are that it assists the process of "direct input capture" and aids the process of computer programming and operation.

In the business world, it is well known that there are only three factors of production, land, labour and capital the fourth one is men who coordinate, all other three to make production. In this case any good organisation needs a fast and accurate system of processing its data and man being what he is (cannot be faster than his shadow) needs a machine that can assist him to coordinate these factors for effective production process - The Computer.

Therefore, a Computer can be defined as an electronic device, which accepts and processes data by following a set of instructions (program) to produce an accurate and efficient result (information).

1.3 CATEGORIES OF COMPUTERS

Computers are categorised according to purpose, type and capacity.

Types of Computers

There are three types of computers namely: Analogue, Digital and Hybrid Computers.

(i) **ANALOG COMPUTERS:**

Analogue Computer operates by measuring and comparing the physical changes of a quantity for example, pressure, temperature, voltage, speed

etc. A speedometer is an example of an analogue device. Here, drive shaft rotation are measured and converted to pointer that indicates the speed of the car. The analogue computer accepts data directly for measuring instruments without need for intermediate concession from/to some symbol or code and to its high speed of data collection, it is used in industries e.g. paper mills, oil refinery, military formation etc. It does not contain memory since it measures or compares data/value.

(ii) **DIGITAL COMPUTERS:**

Digital computers are basically electronic calculating and data processing machines that work with instructions and data, which are, coded in simple binary digit from hence the characterisation "digital." They are used for data processing because they handle alphanumeric characters with precision and speed.

(iii) **HYBRID COMPUTERS:**

These are computers, which may be conceited as combination of digital and analogue computers (i.e. combines the capabilities of analogue and digital processing of collected data is desirable. Hybrid computers are known to have found much application in control and feed back process.

1.4 CLASSIFICATION BY CAPACITY

Digital Computers may be loosely classified according to cost and degrees of sophistication into:

(a) Micro Computers

(b) Mini Computers

(a) **Micro Computers (otherwise called Personal Computers:**

These are computers whose C.P.Us (Central Processing Units) are microprocessors. The microprocessors an integrated circuit

containing all the computational and control circuitry on a single silicon ship in the heart or rather the "brain" of a micro computers. They are often used to perform a specific task and contain only the integrated circuit (ICS) that are necessary for that specific application. They are far cheaper, consume less power, generate less heat, have better software support and are much easier to program than the larger computers. However, they have small memory capacity and are the slowest of all the other categories.

(b) **Mini Computers:**

These are used for more extensive applications where, for example, greater speed, greater memory storage and/or more diverse control functions are required. They are not as flexible as the main frame but they are more versatile and more flexible than the micros.

(c) **Main Frames:**

These are used to solve highly sophisticated problems and they find application in very large-scale commercial data processing. They have very large memory capacity and are the most powerful. They operate at a very high speed and create a fair amount of heat requiring cooling system.

1.5 OBJECTIVES OF THE STUDY

The purpose of this study is to:

1. Examine the stock control of any organisation.
2. Provide an overview of the problems associated with stock control in organisation.

3. Ensure correct quality of stock required.
4. Supply a constant flow of materials for the operation.
5. Identify the type of software, hardware, input/output devices needed and systems for which stock could be computerised.
6. Ascertain the impact of computerised control in the organisation.
7. To answer question on whether the Bank's stock/inventory can be computerised.
8. Recommend to the organisation steps towards achieving a well-computerised stock control to avoid unnecessary loss of goods.

1.6 SCOPE OF THE STUDY

In an organisation, stock control is one that its functions encompass all the aims of the stores operation. The basic concept of stock control is quite simple; that is to supply the right material in the right quantity, of the right quality at the right time and place for processing. Having said that, the element of cost in relation to stock control also plays a vital role, for cost of items determine the maximizing and minimizing the cost.

This study is concentrated in a computerised stock control, in order to pave ways for the time inventory involved in the manual operation. Despite the data used, the program structure could be applied by any other organisation with stock department that wishes to computerise its stock. In Intercity Bank Plc all their activities are manually operated most especially in the data processing sector. The main place of the study is the Head Office Store of the Bank, which is also being operated manually.

CHAPTER TWO

2.1 BRIEF HISTORY OF THE BANK:

Intercity Bank Plc was incorporated on **27th April 1987** as a Private Limited Liability Company to undertake commercial banking operations. The Bank obtained its Banking Licence on **28th October 1987** and commenced full Commercial Banking Operations on **28th October 1988**.

The Bank entered into a **Technical Management Agreement** with **First Bank of Nigeria Plc** for a **Three Year** period ending **1st August 1991**. This agreement was however terminated on **4th December 1990** and a **Five Year** working agreement, which resulted in another Technical Management Agreement with International Merchant Bank Plc, commenced immediately. The Agreement expired in **December 1995.**

With its Head Office in Minna, the Bank has **Seven (7) Branches** located at **Victoria Island, Yaba, Minna, Suleja, Kaduna, Kano, Gusua, Zaria, Port Harcourt, Maiduguri and Abuja** and **Three Cash Centres** at **Minna Central Market, Balogun Market (Lagos)** and **Kofar Wambai Market, Kano**. The Bank's strategic goal is to continuously improve upon the quality and range of its services while expanding its market coverage using the best people and

technology available.

2.2 DATA COLLECTION:

The process of data collection to be applied/used as fact-finding techniques refers to specific method used for collecting data about requirement and they include interview, questionnaire, observation and record review. But for the purpose of this study, interview, observation and record review were employed.

1. Interview was used for collection of information from staff of the Bank who are current users of the existing manual system of operation, most especially those data that are not documented such as the number of received and issued out daily to the various Units or Departments and Branches.
2. Record Review: The Bank has a standard form of its guidelines relating to its store administration. The operation manual served as guide in carrying out the store operations, which are strictly adhered to by the staff involved.

2.3 MANUAL SYSTEM AND PROBLEMS:

All the activities that take place in the Store Administration Unit, which is my main focus of study, are operated manually. The problems associated to the manual operation can be summarised below:

1. The stock system is not properly kept in the sense that there are petty items, which could take much time to be recorded.
2. The monthly stocktaking takes the whole of the day in the month, which could be said to be loss of manpower to the Bank hence staffs are not

attended to on the day.

3. Departments or Unit requesting for supply of store are being delayed until more pressure is being intensify for the fact that the staff in charge cannot say precisely the stock available.
4. It is only the Operation Department that helps keep the records of purchase and supplied or issue out in a situation whereby information is not adequately given a difference will result between the Stock Account and the general ledger.
5. In view of the long protocols involving in the replenishment of stock, some times it takes up to the end of the month before certain stocks could be replenished after such items must have finished from the store.

2.4 COMPUTERISED SYSTEMS AND LIKELY PROBLEMS:

There are many systems for the maintenance of stock records and the processing of these data in use, many of them proprietary "off the peg" pieces of Software for implementation on standard computer and others individually designed or adapted to meet an organisations particular needs.

A computerised system will receive input data, carry out a computation or process on it, and output results. The input may be typed indirectly on a keyboard or read by appropriate devices from printed characters, bar codes, magnetic disc or tape, punched cards and other media. The output will usually either be deployed on a screen or take the form of a print out.

The Computer can, in the simplest applications merely replace a set of stock records cards by maintaining a set of information on stock levels and carrying out adjustment as necessary when directly instructed. A full-scale implementation of a computerised system will make much more when this simple record keeping "possible though for example, the computer might assist

in developing, determining requirements by producing "explosions from production plans, whereby a detailed list of the necessary materials and components are computed from a simple statement of how many units of which particular products are to be assembled. Future requirements might also be computed, perhaps through the use of forecasting or simulation routine within the systems software.

It is naturally common place to find that the stores and stock control elements of a computer system are integrated with purchasing routines as part of a "material" system, and there is an increasing tendency for fully integrated suites of business software to be employed, in which all information records and flows are maintained by one set of records.

As it has been mentioned, whether a company decides upon a manual or computer system for stores records and control will depend upon its particular circumstances, and whichever method is eventually chosen will depend upon the perceived economics of the alternative. It is not possible in a text of this kind to deal much comprehensive way with the vast range of computerised systems in current use.

The world of computers and communications is a rapidly changing one, and a good deal of attention is currently being given to systems which enable direct communication between organisation without necessarily been any human intervention. For example of computer technology finding increased application in the stores function is the Remote Technical, a small hand-held device which can be carried by the Operator and used to input and access information on the main computer either through a telephone or by a radio link. Thus a salesman in the field can allocate stock the instant he makes a sale, or a stock checker can interrogate the system in an attempt to reconcile a discrepancy while located at the storage location of the items concerned.

Basically, computerised data processing is much the same as that done by hand or by electro-mechanical methods. The main difference is that a computer handles all the work at once, in one continuous operation at high speed.

In any case, the following problems are likely to be encountered when computerised:

(a) The company would have to purchase a complete system (Computer) i.e. the Hardware and Software components and Printer etc.

(b) The company or Bank will have to employ a System Analyst and a Programmer to take care of their Data Processing Department for other application they may decide to develop.

(c) The Bank needs to train its staff as Computer Operators and to be able to diagnose whether there is problem or not.

(d) There will be a change in operation in the sense that the former method (manual) is not the same as computerised.

(e) Some of the staff whose work are minor such as checking the level of stock in the store could be redeployed or relieved of their jobs.

Based on the above problems encountered, the Management of the Bank is contemplating on whether or not to embark on the project.

In the event of this study, the Management has been made to understand that although the case study is concentrated on stock control, other different applications and that is why the batch process system is recommended for use by the Bank to allow the computer to perform other relative tasks.

The advantage of mini computer to the store is improving inventory control, reduced price-making expenses, reduced checkout expenses and elimination of checkout errors.

2.5 IMPROVING THE CONTROL OF STOCK

Because of the vital importance of stock control, even to the point of organisational survival, improvements in the control of stocks must constantly be sought.

The Stock Officer in charge must ensure that the stock levels are maintained at the lowest possible levels encouraging suppliers to hold stock is one strategy for holding down stock levels.

2.6 COST BENEFIT ANALYSIS OF THE PROPOSED SYSTEM

DEVELOPMENT COST:

	₦ K
Inventory Control Package	14,000.00
System Analysis Cost	15,000.00
Labour Cost (3 months, 4000/month)	12,000.00
	41,000.00

OPERATING COST OF NEW SYSTEM

	₦ K
Maintenance Cost	3,500.00
Labour Cost (1000/month)	3,000.00
Personnel Cost (2500/month)	7,500.00
TOTAL COST OF THE SYSTEM	**14,000.00**

CHAPTER THREE

3.0 SYSTEM DESIGN

System Design is the process of planning a System or one to replace or to complement an existing system. The first step towards systems design is the identification of system requirement and this is followed by the formulation of design alternatives that is recommendation or strategies of designing a new system.

3.1 PROGRAM SPECIFICATION

This is the document that tells the programmer in complete and precise detail, everything he needs to know to write the program. The system analyst usually prepares it. It therefore acts as a formal term of reference for the development of the program. In writing the program specification, people have different ideas. The contents and layout of program specifications vary from one computer installation to another.

3.2 DESIGNING THE PROGRAM

In designing a programme; The Programmer is expected to make use of an algorithm and flow charts to design his program. This enables him to decide on how to manipulate the input data in order to produce the desired output. The overall design is shown in an outline flow chart.

3.3 ALGORITHMS & FLOW CHARTING:-

An algorithm contains carefully selected elementary instructions that prescribe the basic actions to be performed. It has main properties, which are as follows:

-

i. It is a sequence of steps with some particular starting point.
ii. It is general. That is to say; it can be used to a range of related problems.
iii. It is definite in size and time, in other words it stops for all possible data.
iv. It is definite and unambiguous.

On the other hand, flow-charting is a graphical representation of an algorithm. In designing programs, programmers have discovered that the program can be separated into distinct procedures, which are linked together to form the complete programme. These distinct procedures are normally termed routines. It program flowchart shown a step-by-step approach to solving problem as stated in the program specification.

3.4. CODING THE PROGRAM:-

This is the cost using very suitable high - level language to record the logic and the flow in the flow chart, usually a card image of 80 column coding sheet is

used for this purpose, but in relation to this study, the means to get an image sheet was not there, moreover, the input media will be the keyboard, so a plain sheet was used.

3.5. PREPARATION FOR COMPILATION:-

The method of preparation will depend on the configuration of the computer. However, this involves encoding the program in a medium acceptable to the computer; the medium can be cord, tape, disk etc. For the purpose of this study, a keyboard was used as an input media for preparation for compilation.

3.6 ATTEMPTING TO COMPILE:-

With the aid of a programming language translator, that is, compile (interpreters as in the case with dBase III PLUS), the program as written in a symbolic language is translated into machine code object program, which the computer can executed.

3.7 INPUT AND OUTPUT SPECIFICATION:-

Every program accepts input ant output. These are terms for the source and destination of information, respectively. For example, in this project, the input is from fields in the database files and the data entered by the user during the execution of the program from the keyboard then the output is to use the data keyed in to update the files which is the essence of the program - stock control and at the request of the user display expert the convenient stock position.

STOCK ITEMS IN GROUP

1.	Table	A
2.	Chair	B
3.	Typewriter/microfilming and Photocopier	C
4.	Airconditioner/Fan	D
5.	Bookshelves/filing Cabinets and Safes	E
6.	Calculator	F
7.	Wall clock	G
8.	Fire Extinguisher	h
9.	Computer CPUS	I
10.	Refrigerator	J
11.	Telephone head	K
12.	Computer printer	L
13.	Computer Monitor	M
14.	UPS, CPU, Sewer/Stabilizer	N
15.	External Tape drive	O

DATABASE STRUCTURE

SUPPLY DBF

F/NO.	FIELD DESCRIPTION	FIELD NAME FIELD	TYPE FIELD	WIDTH
1.	ITEM CODE	CODE	D	5
2.	ITEM CATEGORY	CAT	C	1
3.	COST PER ITEM	COST	D	7
4.	QUANTITY IN STOCK	Q-STOCK	D	6
5.	QUANTITY RECEIVED	Q-REC	D	6
6.	DATE RECEIVED	R-DATA	N	8
7.	ITEM DESCRIPTION	DESCRIPTION	C	15

ISSUED DBF

F/NO.	FIELD DESCRIPTION	FIELD NAME FIELD	TYPE FIELD	WIDTH
1.	ITEM CODE	CODE	D	5
2.	ITEM CATEGORY	CAT	C	1
3.	ISSUING PRICE PER ITEM	ISS. PRICE	D	7
4.	QUANTITY IN STOCK	Q-STOCK	D	6
5.	QUANTITY ISSUED	G-REC	D	6
6.	DATE ISSUED	I-DATA	N	8
7.	ITEM DESCRIPTION	DESCRIPTION	C	15
8.	COST PER ITEM	COST	D	7

ISSUED DBF

F/NO.	FIELD DESCRIPTION	FIELD NAME FIELD	TYPE FIELD	WIDTH
1.	ITEM CODE	CODE	D	5
2.	ITEM CATEGORY	CAT	C	1
3.	ITEM DESCRIPTION	DESCRIPTION	D	15
4.	COST PER UNIT ITEM	COST	D	7
5.	QUANTITY STOCK	Q-STOCK	D	6
6.	QUANTITY RECEIVED	Q-REC	N	6
7.	DATE RECEIVEDION	R-DATE	C	8
8.	ISSUING PRICE PER UNIT	ISSU PRICE	D	7
9.	QUNATITY ISSUE	Q-ISSUED	D	6
10.	DATE ISSUED	I-DATE	D	8
11.	BALANCE IN STOCK	B-STOCK	D	7
12.	TOTAL COST PRICE	T-COST	D	8
13.	TOTAL VALUE	T-VAL	D	8
14.	TOTAL ISSUE	T-ISSUE	D	8
15.	BALANCE IN ISSUE	B-ISSUE	D	8

NOTE:

Qstock = Q-stock + Q-Rec

Bstock = Bstock - Q-Issued

Qstock	=	Bstock
Tcost	=	Bstock * cost
Tiss price	=	Bstock * Issued price
Tissu	=	Qissued * Issue price
Bissue	=	T Issuprice * Issu pric

COMPUTERISEING STOCK

In any organization, before one can think of computerizing his business or part of it, containing things will have to be put into consideration. In the case of ICB it is advised that an IBM PC (International Business machine Personal computer) should be used, but then to make good and efficient use of this PC. It is necessary to systematically determine what hardware and software will meet their requirement.

In a nutshell, a business system can be defined in four major categories, hardware, transaction, operation and software. However, it will be good for these categories to be explained briefly as follows:-

3.8.1 HARDWARE:

The term hardware here means any machine used in this application; this include the IBM PC and its peripherals such as printer, visual display unit (VDU), keyboard, backing storage devices of better memory and scale (used for weighing materials)

3.8.2 TRANSACTION

The term transaction here means a sequence of operations that satisfies a requirement in the system. A sequence is a specifically ordered service of events. However, a transaction has two elements. The set of operations and

the sequence in which they are executed.

3.8.3 OPERATIONS:

As earlier said, there are two elements of a transaction; the operations to be executed and the sequence of their execution. In this write-up, we will examine three classes of operations; which are worker operations machine controlled operations and data operations.

A. WORKER OPERATION:

This include the mental and physical activities of personnel. Although some systems are called fully automatic, all require some human intervention, which can be defined as workers operations.

B. MACHINE CONTROLLED OPERATIONS:

This replace worker operations with work done by mechanical or electrical devices. They usually include the movement of people or materials from one location to another. However, varying degrees of automatic are present within these operations, depending on the ratio of operation control to automatic control of the devices involved.

C. DATE OPERATIONS:

These are operations that more or modify data instead of physical goods most of the programs used in a business consist of data operations. these includes calculation programs that modify and update and programs that store and retrieve information.

However, there are usually some criteria for using computers in organizations such as:-

1. Volume of data to be processed
2. Increased efficiency, accuracy and consistency
3. Complex calculation
4. Speed and ability access data from remote location
5. Receptiveness of Tasks

3.9 SOFTWARE COMPONENTS:

Computer Software is information that exists in two basis forms: Non-machine -erectable components and machines executable components. For the purpose of this study, only those software components leading directly to machine execution instructions are presented. The manner in which software is translated into machine-executable form is illustrated below: -

Branch/Departments Software ----- Translated ----- L/oriented
Requirement design M/reliable
------Translator -------Machine Executed form

Software transaction steps:

The software is translated into a language form that specifies software and related requirements. The language form is processed by a translator that connects it into machines executable instructions.

3.10 DATABASE PROGRAM:

This software provides the user with tools to organize, store and retrieve data from the computer. They can operate interactively with, or independently of, the application programs to describe the location, consents of relationship and security level of stored data-mostly this often include utilities programs that will sort, format and print from the data.

CHAPTER FOUR

4.0 SYSTEM IMPLEMENTATION

System implementation is the process of taking a system and placing it into operation such techniques as program evaluation and review technique can be used to schedule the new project. Systems implementation involves:

1. Installation, 2. Testing 3. Conversion 4. Maintenance 5. Documenting

4.1 INSTALLATION:

Installation is the process of physically placing the computer equipment on the site and making it operational. After the system is installed, several test code performed by the manufacturer to ensure that the equipment is operating, as it should.

4.2 TESTING:

Once the program has been written, it will have to be tested if there is an error, a system - error message is passed through the computer diagnosis or scanning (operating system) the next thing is to ascertain the logic of the program that will provide the desired output from input, although this is not an easy task.

4.3 CONVERSION:

This is the process of changing from old system to new system. These are four

processes:

a) **Parallel:**

The operation of old and new system are operated in parallel.

b) **Direct Cutover:**

The operation of old system is replaced by new system.

c) **Pilot Approach:**

The working version of the system is implemented in one part if the organization, base in the feedback changes are made and the system is installed in the rest part either all at once or gradually.

1) **PHASE=IN METHOD:**

This is the general process of changing from old system to new system.

4.4 MAINTENANCE:

Like automobile and manufacturing equipment, computer systems should be periodically maintained. This process included checking to make sure everything is operating as intended and taking corrective action when necessary. In some case, major problem will be encountered that will involve a recycling of the entire system's analysis and design process.

In addition to hardware, software must also be maintained. Software maintenance can be one of the most expensive aspects of software development and use.

4.5 DOCUMENTING:

Documenting the program involves keeping or making available all the things that will and the time a program has been working for years a fault occurs when not expected, more so there is every tendency that the person who write the program may not be the person using it as at the time, without proper

documentation, it will be difficult for another programmer to maintain the program effectively.

4.6 DATABASE FIELD DESCRIPTION:

There are 3 database files in use, namely:- Supply Database, Inventory Database file and the Sales Database file.

4.6.1 SUPPLY DATABASE FILE:

This is the file where items supplied newly into the store are first recorded and as they are recorded, the inventory balance is automatically updated by adding the new item to the already existing ones in the file.

4.6.2 INVENTORY DATABASE FILES:

This keeps all records of the stock balance, supply records and issue records in the store.

4.6.3 SALES OR ISSUED DATABASE FILE:

Keeps records of items issued out to the branches or departments. As those items issued out are recorded, the inventory is automatically up-dated by reducing the item issued from the already existing item in the inventory file. The identification (D) key is the item code.

Main Menu:

Is the main program that displays the main menu of the system. It displays different subprogram for implementation.

Master Menu:

Is a subprogram that displays the menu for the master file. It displays subprograms for implementation under the transaction file.

Report Menu:

Is a subprogram that displays the menu for the kinds of output reports.

Supply Menu:

Is a subprogram that displays the menu for the transaction under supply.

Inventory Menu:

Is a subprogram that display the menu for the processing for inventory taking.

Sales Or Issued:

Is a subprogram that displays the menu for the issued or sales transaction.

Add Menu:

Is a subprogram that allows the addition of records into the stock.

Delete Menu:

This allows the deleting and packing of the data in the data entry functions.

CHAPTER FIVE

5.0 CONCLUSION AND RECOMMENDATION

5.1 CONCLUSION

The system is designed to provide management with timely information, and to ensure proper accountability in intercity Bank Plc. The system enhances timely report generated for all transactions in the store as the management might deem fit.

The stock system of Intercity Bank will be change by the introduction of this system thereby making transaction easy for both the management and staff of the company. Any other organization wishing to use the system could do so, through the steps stated.

However, nobody is perfect, therefore this program cannot be said to be error free, but as time goes on through constant use and by different organizations several modifications may be required and some sort of debugging.

I do hope that the program will achieve its aim by using the Database files to keep track of the inventory of Intercity Bank Plc, Minna. No user password is used in this program to avoid difficulty in execution.

5.2 RECOMMENDATIONS

I have the following recommendations to make to the company and any other person who may adopt the system.

1. That all the department staff of Administration Department who are in charge of stocks and inventory should be trained to be computer literate and to know how the program functions.
2. That all the items should be followed accurately with out mis-spelling and code interchange to enable the program kind what record you are referring to.
3. That a record clerk, if possible two be kept standby to record all issue and supplies as per their group and fields hence the system is not on-line or real time processing mode.
4. The management should provide adequate security for the equipment against such things like:-
   a) Fire
   b) Natural Disaster

c) Environment problem

d) Sabotage

5. Anybody who may be employed to manage the data processing department of the company should make sure that adequate security is provided for files to avoid loss of data, such securities includes:-

a) Back-up copies of files

b) Authorized password for users

c) Scope of Access

d) Installation Security

Finally, I recommend that the Bank should make haste and get one or two P.C for the computerization of their stock and inventory.

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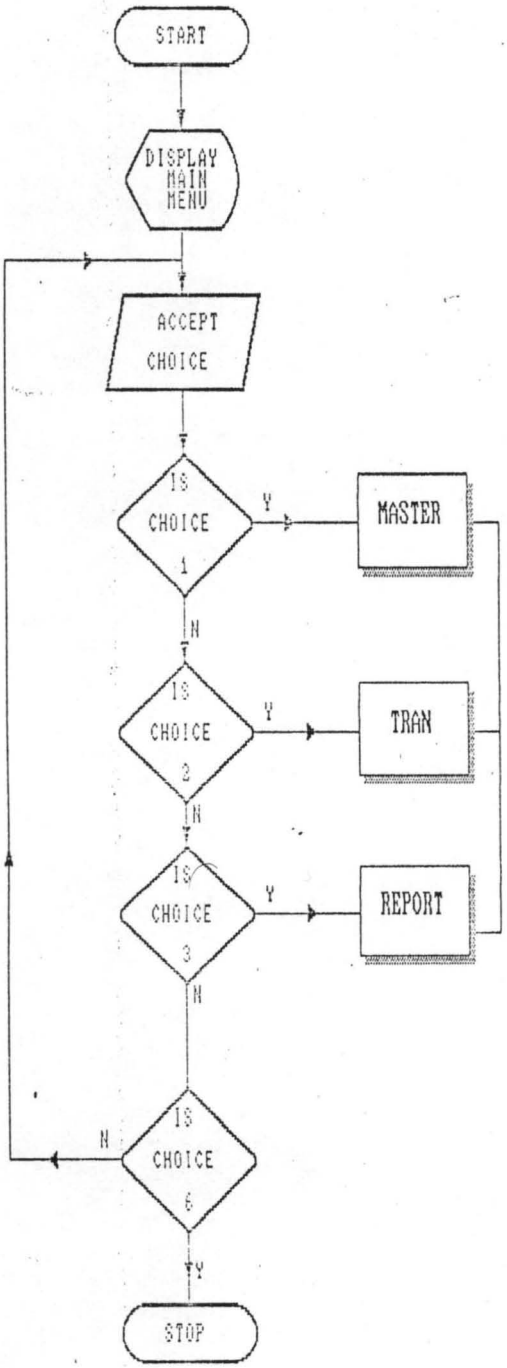
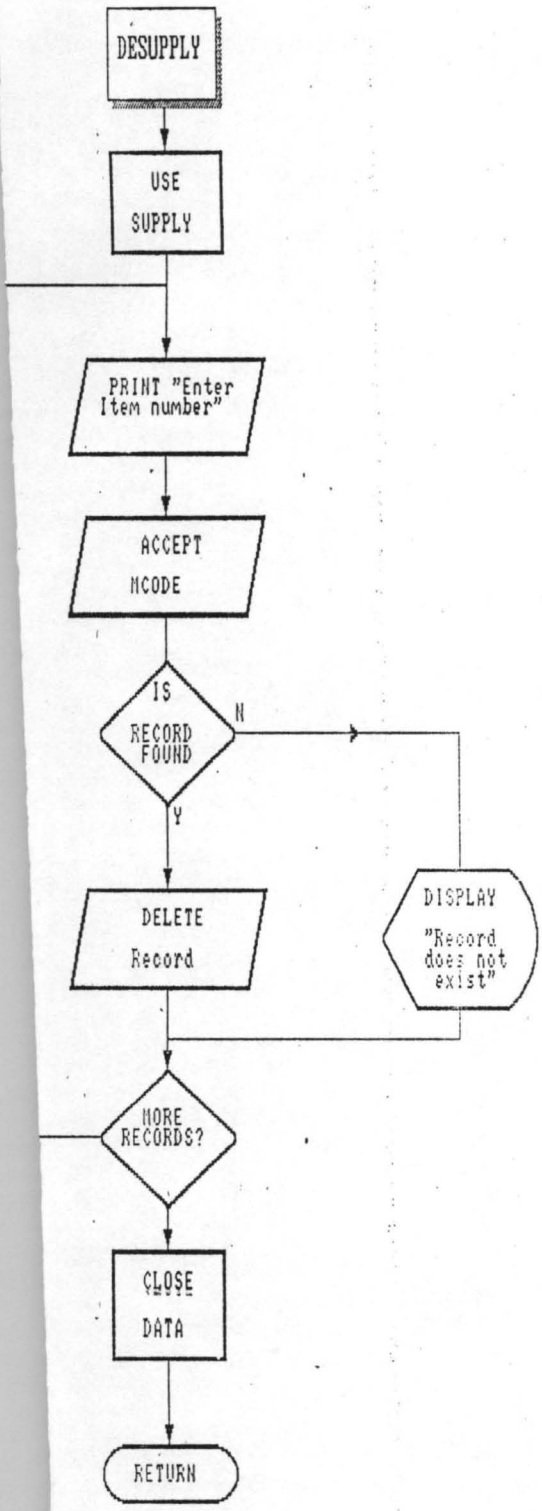
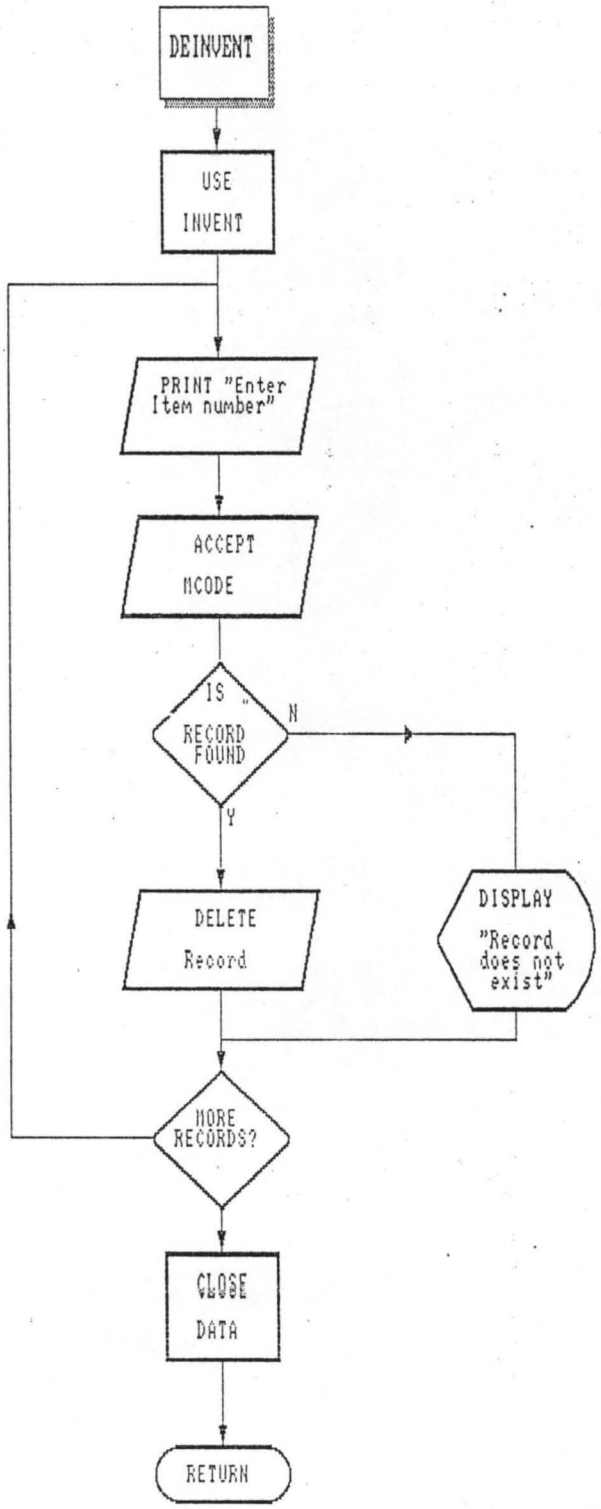
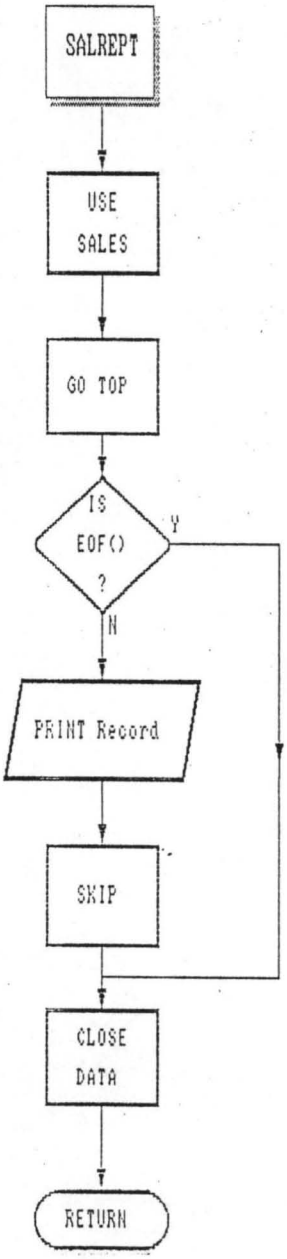
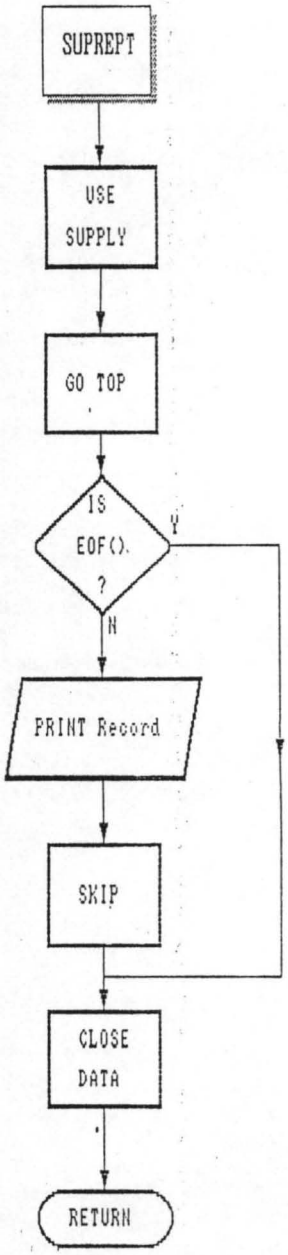
MAIN PROGRAM FLOWCHART

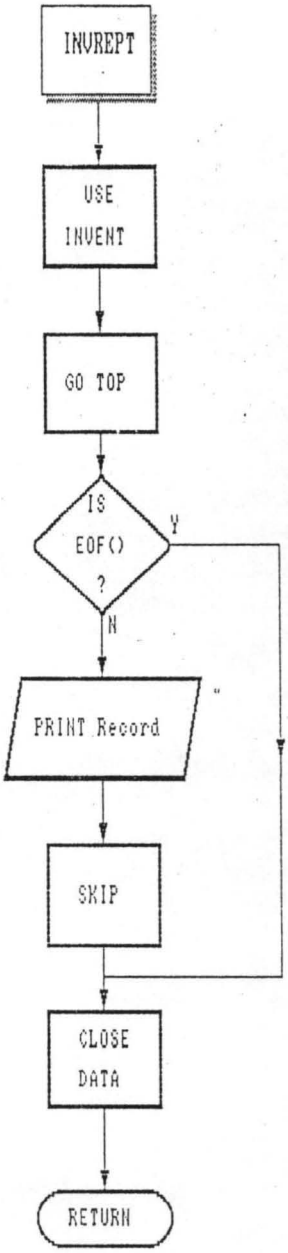


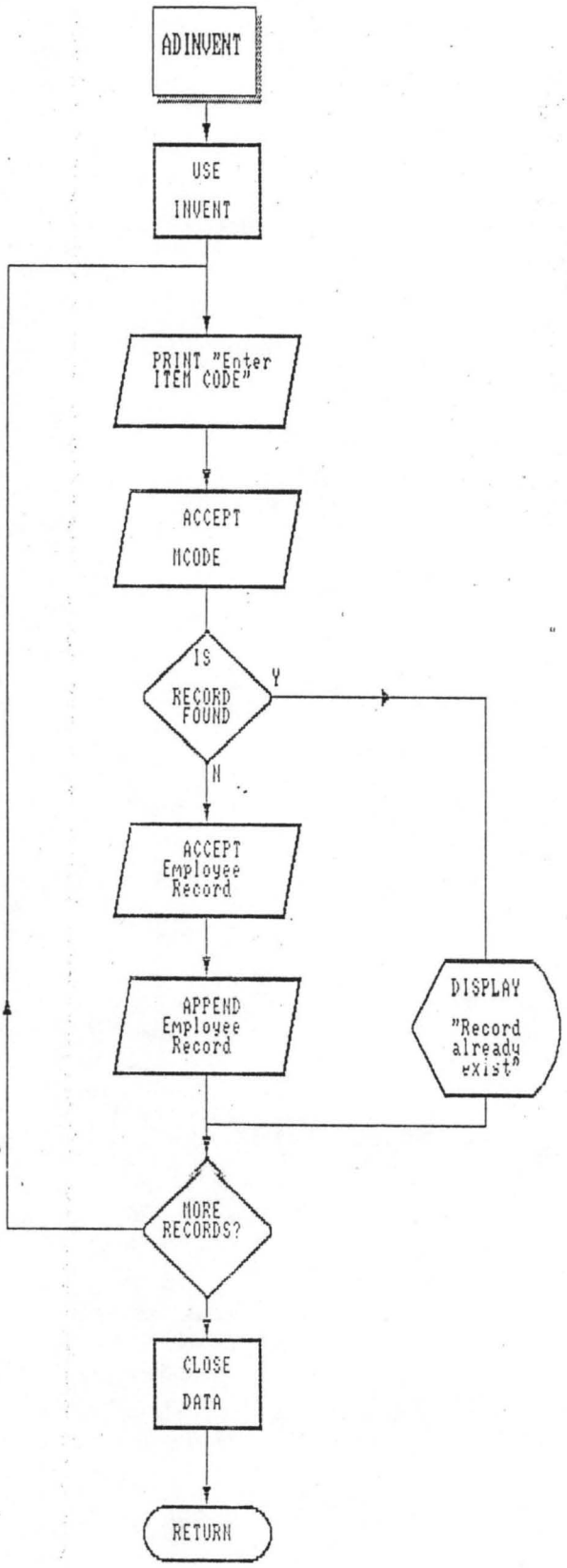

DESUPPLY
USE
SUPPLY
PRINT "Enter
Item number"
ACCEPT
MCODE
IS
RECORD
FOUND
N
Y
DELETE
Record
DISPLAY
"Record
does not
exist"
MORE
RECORDS?
CLOSE
DATA
RETURN

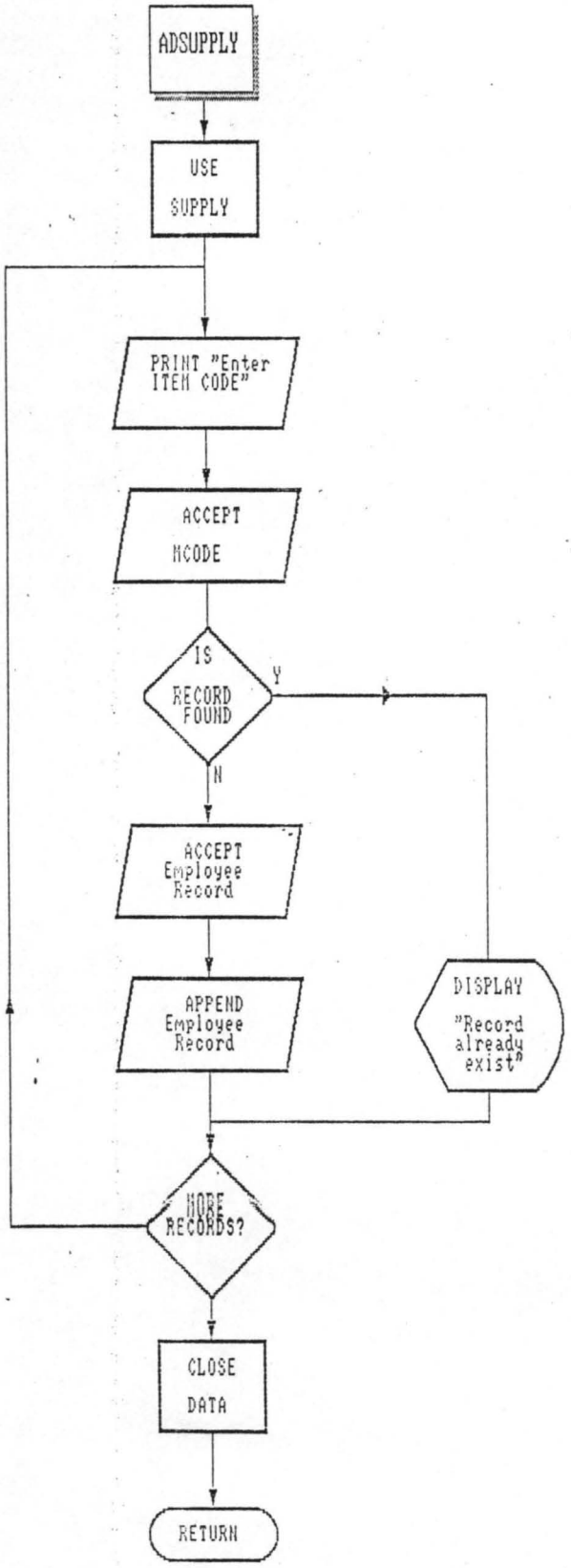

DEINVENT
USE
INVENT
PRINT "Enter
Item number"
ACCEPT
MCODE
IS
RECORD
FOUND
N
Y
DELETE
Record
DISPLAY
"Record
does not
exist"
MORE
RECORDS?
CLOSE
DATA
RETURN

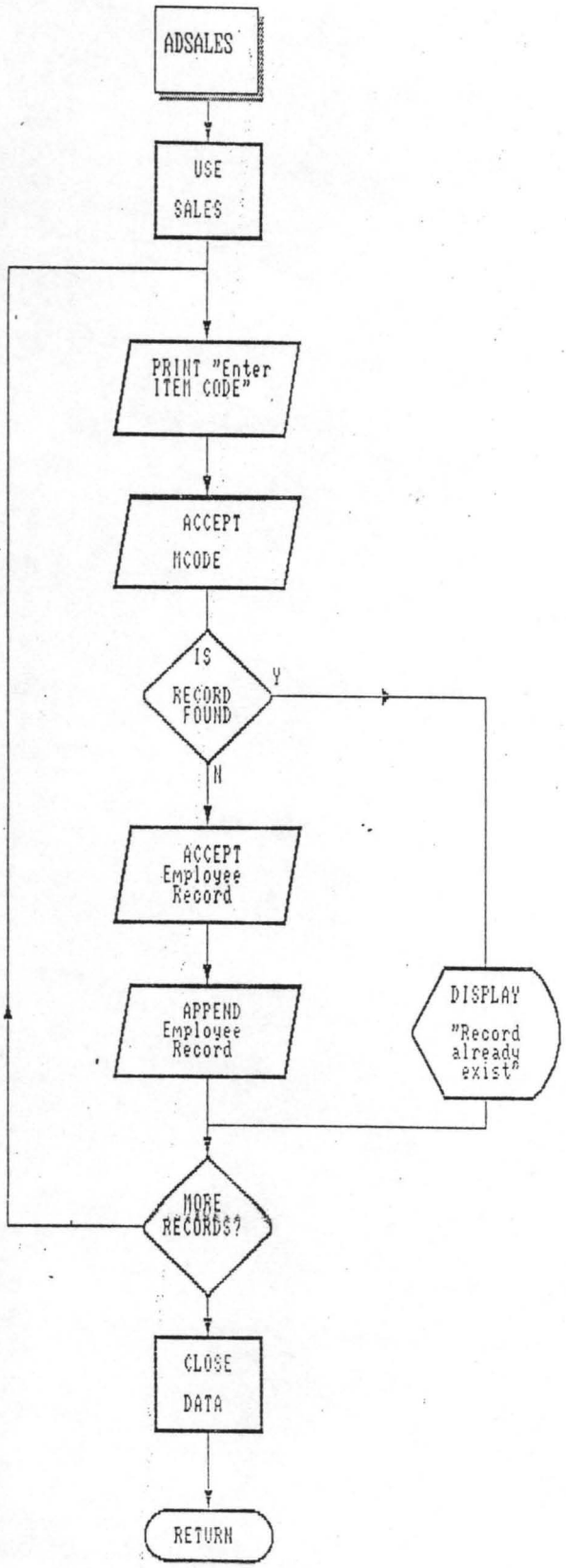

SALREPT
USE
SALES
GO TOP
IS
EOF()
?
Y
N
PRINT Record
SKIP
CLOSE
DATA
RETURN

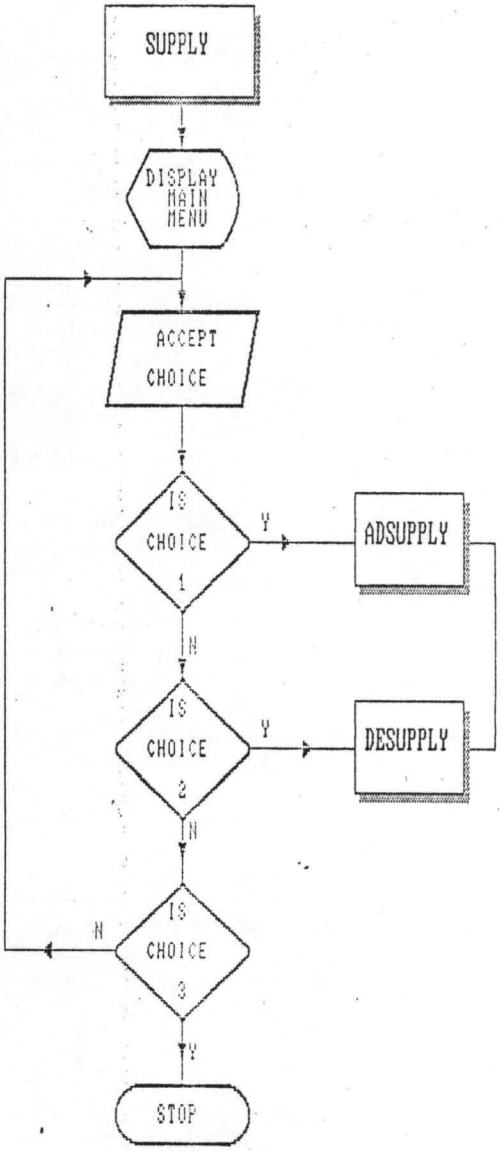

SUPREPT
USE
SUPPLY
GO TOP
IS
EOF()
?
Y
N
PRINT Record
SKIP
CLOSE
DATA
RETURN

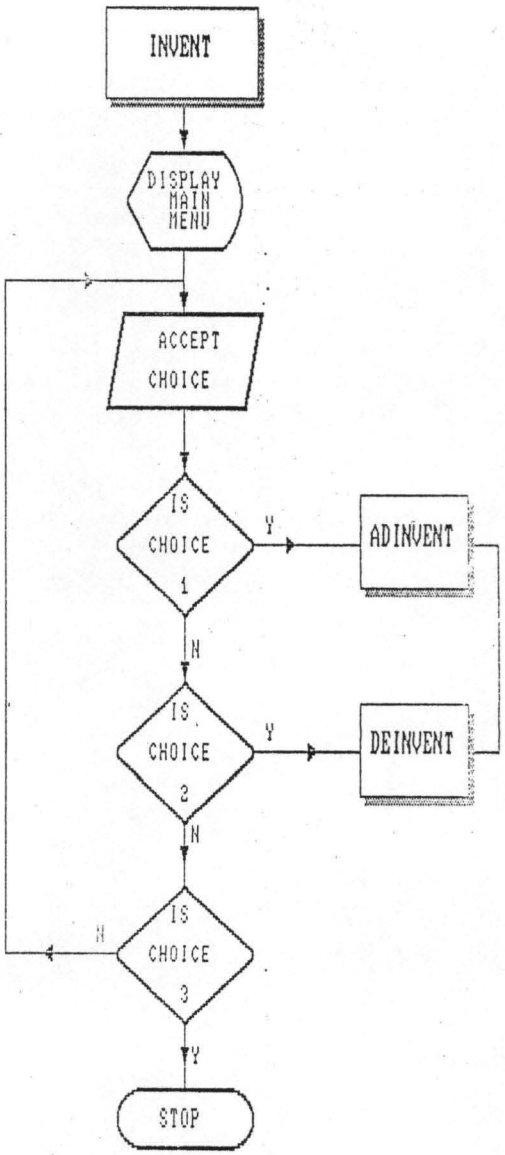

INVREPT
USE
INVENT
GO TOP
IS
EOF()
?
Y
N
PRINT Record
SKIP
CLOSE
DATA
RETURN

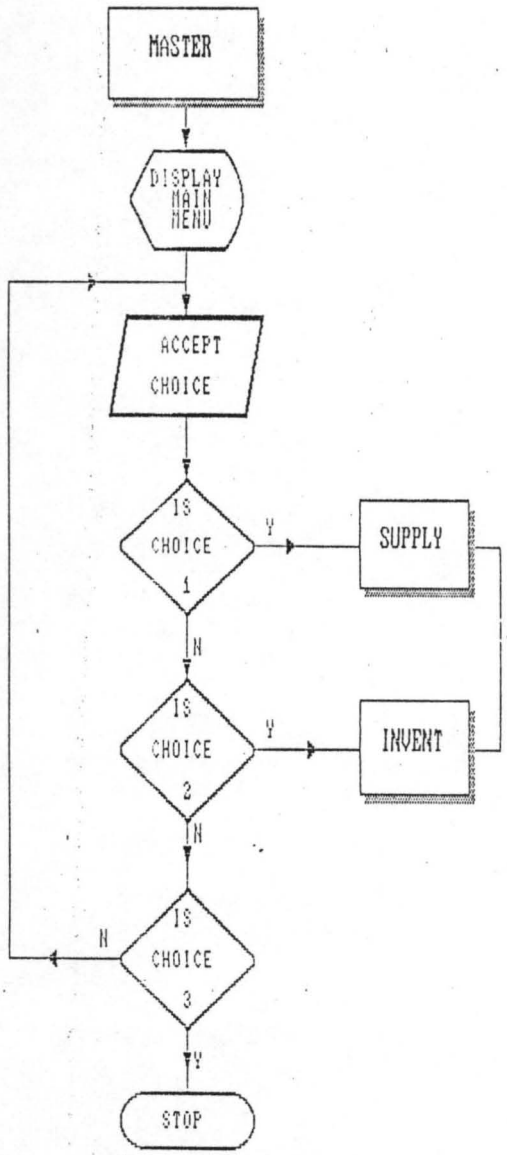

ADINVENT
USE
INVENT
PRINT "Enter
ITEM CODE"
ACCEPT
MCODE
IS
RECORD
FOUND
Y
N
ACCEPT
Employee
Record
APPEND
Employee
Record
DISPLAY
"Record
already
exist"
MORE
RECORDS?
CLOSE
DATA
RETURN


ADSUPPLY
USE
SUPPLY
PRINT "Enter
ITEM CODE"
ACCEPT
MCODE
IS
RECORD
FOUND
Y
N
ACCEPT
Employee
Record
APPEND
Employee
Record
DISPLAY
"Record
already
exist"
MORE
RECORDS?
CLOSE
DATA
RETURN


ADSALES
USE
SALES
PRINT "Enter
ITEM CODE"
ACCEPT
MCODE
IS
RECORD
FOUND
Y
N
ACCEPT
Employee
Record
APPEND
Employee
Record
DISPLAY
"Record
already
exist"
MORE
RECORDS?
CLOSE
DATA
RETURN


SUPPLY
DISPLAY MAIN MENU
ACCEPT CHOICE
IS CHOICE 1
Y
ADSUPPLY
N
IS CHOICE 2
Y
DESUPPLY
N
IS CHOICE 3
N
Y
STOP


INVENT
DISPLAY MAIN MENU
ACCEPT CHOICE
IS CHOICE 1
Y
ADINVENT
N
IS CHOICE 2
Y
DEINVENT
N
IS CHOICE 3
N
Y
STOP


MASTER
DISPLAY MAIN MENU
ACCEPT CHOICE
IS CHOICE 1
Y
SUPPLY
N
IS CHOICE 2
Y
INVENT
N
IS CHOICE 3
N
Y
STOP

```
******THIS PROGRAM IS DESIGNED TO KEEP RECORDS OF STOCK
******IN INTERCITY BANK PLC H/Q MINNA.
******
******PROJECT WORK BY: DANJUMA MOHAMMED
******
CLOSE DATA
SET TALK OFF
SET ECHO OFF
SET STATUS OFF
SET COLOR TO W+/B
*SET PROCEDURE TO MAIN FILE
CLEAR
K = .T.
DO WHILE K
@4,6 TO 22,70 DOUBLE
@6,8 SAY [AUTHOR= MOHAMMED DANJUMA ALI]
@8,8 SAY [PROGRAM= STOCK CONTROL]
@10,8 SAY [DATE: 10-09-98]
@12,8 SAY [FUNCTION: TO COMPUTERISE STOCK/INVENTORY CONTROL SYSTEM]
@14,8 SAY [PROJECT TITLE: COMPUTERISED STOCK CONTROL SYSTEM FOR]
@16,8 SAY [INTERCITY BANK PLC. MINNA]
@22,8 SAY [PRESS ANY KEY TO CONTINUE---]
K = .F.
WAIT ""
ENDDO
CLEAR
SET TALK OFF
SET ECHO OFF
SET ESCAPE OFF
SET STATUS OFF
K = .T.
DO WHILE K
@4,25 SAY "INTERCITY BANK PLC H/Q MINNA"
@6,25 SAY "STOCK CONTROL SYSTEM MAIN MENU"
STORE SPACE(1) TO CHOICE
@7,20 TO 22,60 DOUBLE
@10,22 CLEAR TO 21,59
@12,25 SAY [M----VIEW MASTER]
@14,25 SAY [T----VIEW TRANS]
@16,25 SAY [R----VIEW REPORT]
@18,25 SAY [E----EXIT]
@20,25 SAY [ENTER YOUR CHOICE]
@20,45 GET CHOICE PICT "@!"
 READ
CLEAR
  DO CASE
  CASE CHOICE='M'
    DO MASTER
    loop
  CASE CHOICE='T'
    DO TRANS
  CASE CHOICE='R'
    DO REPORT
  CASE CHOICE ='E'
    K = .F.
  ENDCASE
CLEAR
loop
ENDDO
RETURN
```

```
PROCEDURE MASTER
X = .T.
DO WHILE X
CHOICE=' '
@4,20 TO 23,70 DOUBLE
@6,22 SAY "MASTER FILE MENU"
@10,30 SAY "[S----VIEW SUPPLY]"
@12,30 SAY "[I----VIEW INVENT]"
@14,30 SAY "[E----EXIT]"
@16,30 SAY "[ENTER YOUR CHOICE]"
@16,55 GET CHOICE PICT "@!"
 READ
  DO CASE
  CASE CHOICE='S'
    DO SUPPLY
  CASE CHOICE='I'
    DO INVENT
  CASE CHOICE='E'
    CLEAR
    X = .F.
  ENDCASE
  loop
  ENDDO
RETURN

PROCEDURE TRANS
G = .T.
DO WHILE G
CHOICE=' '
@3,30 SAY "TRANSACTION FILE"
@5,8 TO 23,70 DOUBLE
@7,10 SAY "[S----VIEW SALES]"
@9,10 SAY "[E----EXIT]"
@11,10 SAY "[ENTER YOUR CHOICE]"
@11,32 GET CHOICE PICT "@!"
 READ
  DO CASE
  CASE CHOICE='S'
  DO SALES
  CASE CHOICE='E'
 CLEAR
  G = .F.
 CLOSE DATA
 ENDCASE
 loop
 ENDDO
RETURN

PROCEDURE REPORT
H = .T.
DO WHILE H
STORE SPACE (1) TO CHOICE
@3,30 SAY "REPORT"
@4,10 TO 22,65 DOUBLE
@8,15 SAY "[S----VIEW SUPPLY REPORT]"
@10,15 SAY "[I----VIEW INVENT REPORT]"
@12,15 SAY "[L----VIEW SALES REPORT]"
@14,15 SAY "[E----EXIT]"
@16,15 SAY "[PLEASE ENTER YOUR CHOICE]"
@16,45 GET CHOICE PICT "@!"
 READ
```

```
  DO CASE
  CASE CHOICE='S'
  DO SUPREPT
  CASE CHOICE='I'
  DO INVREPT
  CASE CHOICE='L'
  DO SALREPT
  CASE CHOICE='E'
  CLEAR
  H = .F.
  CLOSE DATA
  ENDCASE
  ENDDO
  RETURN

PROCEDURE SUPPLY
CLEAR
L = .T.
DO WHILE L
CHOICE= SPACE(1)
@4,6 TO 22,75 DOUBLE
@8,25 SAY "SUPPLY OF ITEM"
@12,30 SAY "[A----VIEW ADD SUPPLY]"
@14,30 SAY "[D----VIEW DELETE SUPPY]"
@16,30 SAY "[E----EXIT]"
@18,30 SAY "[ENTER CORRECT CHOICE]"
@18,70 GET CHOICE PICT "@!"
 READ
  DO CASE
  CASE CHOICE='A'
  DO ADSUPPLY
  EXIT
  CASE CHOICE='D'
  DO DESUPPLY
  EXIT
  CASE CHOICE='E'
  CLEAR
  L = .F.
  CLOSE DATA
  ENDCASE
  ENDDO
  RETURN

PROCEDURE INVENT
CLEAR
M = .T.
DO WHILE M
CHOICE=' '
@5,30 SAY "INVENTORY SYSTEM"
@7,12 TO 22,70 DOUBLE
@11,25 SAY "[A----VIEW ADD INVENT]"
@13,25 SAY "[D----VIEW DELETE INVENT]"
@15,25 SAY "[E----EXIT]"
@17,25 SAY "[ENTER CORRECT CHOICE, PLEASE]"
@17,65 GET CHOICE PICT  "@!"
 READ
  DO CASE
  CASE CHOICE='A'
  DO ADINVENT
  LOOP
  CASE CHOICE='D'
```

```
   DO DEINVENT
   LOOP
   CASE CHOICE='E'
   CLEAR
   M = .F.
   CLOSE DATA
   ENDCASE
   ENDDO
   RETURN

PROCEDURE DESALES
***DO WHILE .T.
***MODULE THAT DELETES RECORD FROM THE SALES DATABASE FILE
SET TALK OFF
SET ECHO OFF
MCODE=SPACE(4)
USE SALES
DO WHILE .T.
CLEA
@8,6 TO 12,70 DOUBLE
@10,8 SAY "TYPE IN CODE NUMBER TO DELETE OR Q TO QIUT--"
@10,65 GET MCODE
READ
**VERIFY IF CODE IS CORRECT
IF MCODE='Q'
CLEAR
EXIT
ENDIF
LOCATE FOR CODE=MCODE
**IF THERE IS NO SUCH RECORD**
IF .NOT. FOUND()
CLEAR
@7,11 TO 9,70
@8,20 SAY "NO SUCH RECORD IN FILE--"
WAIT
ELSE
****IF RECORD IS FOUND THEN STORE IT
**PERFORM REPLACEMENT**
DO WHILE .T.
@18,0 CLEAR TO 20,75
WAIT "ARE YOU SURE YOU WANT TO DELETE A RECORD(Y/N)--" TO CHOICE
DO CASE
CASE CHOICE='N'
  CLEAR
  EXIT
CASE CHOICE='Y'
  CLEAR
  @4,20 SAY "DELETE OF RECORD"
  DELETE
  PACK
  @8,13 TO 10,42 DOUBLE
  @9,15 SAY "RECORD HAS BEEN DELETED!!"
  WAIT
  CLEAR
  EXIT
OTHERWISE
  LOOP
ENDCASE
ENDDO
ENDIF
ENDDO
```

```
CLOSE ALL
RETURN

PROCEDURE SALES
CLEAR
DO WHILE .T.
CHOICE=SPACE(1)
@3,20 SAY "SALES MAINTAINCE"
@5,13 TO 21,65 DOUBLE
@10,25 SAY "[A----VIEW ADD SALES]"
@12,25 SAY "[D----VIEW DELETE SALES]"
@14,25 SAY "[E----VIEW EXIT]"
@16,25 SAY "[ENTER YOUR CHOICE]"
@16,25 SAY "[ENTER YOUR CHOICE]"
@16,45 GET CHOICE PICT "@!"
READ
DO CASE
CASE CHOICE='A'
DO ADSALES
LOOP
CASE CHOICE='D'
DO DESALES
LOOP
CASE CHOICE='E'
CLEAR
EXIT
ENDCASE
ENDDO
RETURN



PROCEDURE ADSUPPLY
CLEAR
SET TALK OFF
SET STATUS OFF
SET ECHO OFF
DO WHILE .T.
CLEAR
SET DATE BRITISH
CLEAR
MCODE=SPACE(4)
STORE SPACE(1) TO MCAT
STORE 0 TO MQ_STOCK, MQ_REC
MDESCRIP=SPACE(15)
MCOST=0
DATE=CTOD("  /  /  ")
MRDATE=CTOD("  /  /  ")
*SELECT 1
*USE SUPPLY
*SET TALK OFF
*SET ESCAPE ON
ANSWER=' '
DO WHILE .T.
@8,10 SAY "TYPE IN ITEM CODE OR Q TO QUIT"
@8,50 GET MCODE
READ
IF MCODE='Q'
CLEAR
RETURN
ENDIF
```

```
CLEAR
DO WHILE .T.
@4,8 SAY "INTERCITY BANK PLC H/Q, MINNA"
@5,6 TO 23,65 DOUBLE
@7,11   SAY     "ENTER OF SUPPLY"
@7,55   SAY     DATE()
@10,8   SAY     "TYPE  IN ITEM CODE NUMBER:"
@12,8   SAY     "TYPE  IN ITEM CATEGORY:"
@14,8   SAY     "TYPE  IN QUANTITY IN STOCK:"
@16,8   SAY     "TYPE  IN QUANTITY RECEICED:"
@18,8  SAY      "TYPE IN ITEM DESCRIPTION:"
@20,8   SAY     "TYPE  IN COST PER UNIT:"
@22,8   SAY     "TYPE  IN DATE RECEIVED:"
@10,40 GET MCODE
@12,40 GET MCAT PICT "@!"
@14,40 GET MQ_STOCK PICT "999999"


@16,40 GET MQ_REC PICT "999999"
@18,40 GET MDESCRIP PICT "@!"
@20,40 GET MCOST PICT "999999.99"
@22,40 GET MRDATE PICT "99/99/99"
*@7,65 SAY DATE PICT "99/99/99" READ
SET ESCAPE   ON
@23,8 SAY "[ARE ALL ENTERIES CORRECT]"
@23,35 GET ANSWER PICT "!"
READ
IF UPPER (ANSWER) ='N'
LOOP
ENDIF
IF UPPER(ANSWER)='Y'
USE SUPPLY
APPEND      BLANK
REPL  CODE WITH MCODE
REPL  CAT WITH MCAT
REPL    Q_STOCK WITH MQ_STOCK
REPL    Q_REC WITH MQ_REC
REPL  DESCRIP WITH MDESCRIP
REPL  COST WITH MCOST
REPL  R_DATE WITH MRDATE
CLEAR
ENDIF
USE INVENT
LOCATE FOR MCODE=CODE
append blank
MBSTOCK=MQ_STOCK+MQ_REC
MTCOST=MCOST*MBSTOCK
REPL  CODE WITH MCODE
REPL  CAT WITH MCAT
REPL    Q_STOCK WITH MQ_STOCK
REPL    Q_REC WITH MQ_REC
REPL  DESCRIP WITH MDESCRIP
REPL  COST WITH MCOST
*UPDATE ON CODE FROM SUPPLY
REPL BSTOCK WITH MBSTOCK
REPL TCOST WITH MTCOST
* REPL SELPRIC WITH MSELPRC
*REPL TSELPRIC WITH MTSELPRIC
EXIT
ENDDO
ENDDO
```

```
ENDDO
RETURN


PROCEDURE DESUPPLY
**THIS PROGRAM DELETES RECORD FROM SUPPLY DATABASE FILE
SET TALK OFF
SET ECHO OFF
MCODE=SPACE(4)
USE SUPPLY
DO WHILE .T.
CLEAR
@8,6 TO 12,70 DOUBLE
@10,8 SAY "TYPE IN CODE NUMBER TO DELETE OR Q TO QIUT--"
@10,65 GET MCODE
READ
**VERIFY IF CODE IS CORRECT
IF MCODE="Q"
CLEAR
EXIT


ENDIF

LOCATE FOR CODE=MCODE
**IF THERE IS NO SUCH RECORD**
IF .NOT.  FOUND()
CLEAR
@7,11 TO 9,70
@8,20 SAY "NO SUCH RECORD IN FILE--"
WAIT
ELSE
****IF RECORD IS FOUND THEN STORE IT
**PERFORM REPLACEMENT**
DO WHILE .T.
@18,0 CLEAR TO 20,75
WAIT "ARE YOU SURE YOU WANT TO DELETE A RECORD(Y/N)--" TO CHOICE
DO CASE
CASE CHOICE='N'
CLEAR
EXIT
CASE CHOICE='Y'
CLEAR
@4,20 SAY "DELETE OF RECORD"
DELETE
PACK
@8,13 TO 10,42 DOUBLE
@9,15 SAY "RECORD HAS BEEN DELETED!!"
WAIT
CLEAR
EXIT
OTHERWISE
LOOP
ENDCASE
ENDDO
ENDIF
ENDDO
CLOSE ALL
RETURN
```

```
PROCEDURE ADINVENT
CLEAR
MCODE=SPACE(4)
STORE SPACE(1) TO MCAT
STORE SPACE(15) TO MDESCRIP
STORE 0 TO MQ_STOCK,MQ_REC
STORE 000.00 TO MCOST,MSELPRIC
MRDATE=CTOD("  /  /  ")
DATE=CTOD("  /  /  ")
USE INVENT
SET DATE BRITISH
DO WHILE .T.
@8,10 SAY "ENTER ITEM CODE OR Q TO QUIT"
@8,60 GET MCODE
READ
IF MCODE='Q'
CLEAR
RETURN
ENDIF
CLEAR
@4,8 SAY "INTERCITY BANK PLC H/Q MINNA"
@5,6 TO 23,68 DOUBLE
@6,10 SAY "ADDITION OF INVENTORY"
@6,50 SAY DATE()
@8,10 SAY "TYPE IN ITEM CODE NUMBER:"
@10,10 SAY "TYPE IN ITEM CATEGORY:"
@12,10 SAY "TYPE IN QUANTITY IN STOCK:"
@14,10 SAY "TYPE IN QUATITY RECEIVED:"
@16,10 SAY "TYPE IN ITEM DESCRIPTION:"
@18,10 SAY "TYPE IN COST PER-UNIT:"
@20,10 SAY "TYPE IN DATE RECEIVED:"
@22,10 SAY "TYPE IN SELLING PRICE:"
@8,35 GET MCODE
@10,35      GET MCAT PICT "@!"
@12,35      GET MQ_STOCK PICT "999999"
@14,35      GET MQ_REC PICT "999999"
@16,35      GET MDESCRIP PICT "@!"
@18,35  GET MCOST PICT "999999.99"
@20,35      GET MRDATE PICT "99/99/99"
@22,35      GET MSELPRIC PICT "999999.99"
@6,56 GET DATE PICT "99/99/99"
READ
SET ESCAPE ON
STORE SPACE(1) TO ANSWER
@23,35 SAY "[ARE ALL ENTRIES CORRECT]"
@23,60 GET ANSWER PICT "@!"
READ
IF UPPER(ANSWER)="N"
EXIT
ENDIF
IF UPPER(ANSWER)="Y"
APPEND      BLANK
REPL  CODE WITH MCODE
REPL  CAT WITH MCAT
REPL    Q_STOCK WITH MQ_STOCK
REPL    Q_REC WITH MQ_REC
REPL    DESCRIP WITH MDESCRIP
REPL  COST WITH MCOST
REPL    R_DATE WITH MRDATE
REPL  SELPRIC WITH MSELPRIC
MSELPRIC=0000.00
```

```
MCODE=SPACE(4)
CLEAR
ENDIF
ENDDO
RETURN


**THIS MODULES DELETES RECORD FROM INVENT DATABASE FILE
PROCEDURE DEINVENT
SET TALK OFF
SET ECHO OFF
MCODE=SPACE(4)
USE INVENT
DO WHILE .T.
CLEAR
@8,6 TO 12,70 DOUBLE
@10,8 SAY "TYPE IN CODE NUMBER TO DELETE OR Q TO QIUT--"
@10,65 GET MCODE
READ
**VERIFY IF CODE IS CORRECT
IF MCODE='Q'
CLEAR
EXIT
ENDIF
LOCATE FOR CODE=MCODE
**IF THERE IS NO SUCH RECORD**
IF .NOT.  FOUND()
CLEAR
@7,11 TO 9,70
@8,20 SAY "NO SUCH RECORD IN FILE--"
WAIT
ELSE
****IF RECORD IS FOUND THEN STORE IT
**PERFORM REPLACEMENT**
DO WHILE .T.
@18,0 CLEAR TO 20,75
WAIT "ARE YOU SURE YOU WANT TO DELETE A RECORD(Y/N)--" TO CHOICE
DO CASE
CASE CHOICE='N'
CLEAR
EXIT
CASE CHOICE='Y'
CLEAR
@4,20 SAY "DELETE OF RECORD"
DELETE
PACK
@8,13 TO 10,42 DOUBLE
@9,15 SAY "RECORD HAS BEEN DELETED!!"
WAIT
CLEAR
EXIT
OTHERWISE
LOOP
ENDCASE
ENDDO
ENDIF
ENDDO
CLOSE ALL
RETURN
```

```
****PROGRAM NAME:ADD SALES
PROCEDURE ADSALES
SET TALK OFF
SET SCOREBOARD OFF
SET STATUS OFF
DO WHILE .T.
CLEAR
SET DATE BRITISH
CLEAR
MCODE=SPACE(4)
STORE SPACE(1) TO MCAT
STORE SPACE(15) TO MDESCRIP
STORE 0 TO MQ_STOCK,MQ_ISSUED
STORE 0000.00 TO MSELPRIC
MBSALE=0
MTSALE=0
MTSELPRIC=0
BSALE=0
DATE=CTOD("  /  /  ")
MIDATE=CTOD("  /  /  ")
*DO WHILE .T.
*USE SALES
@8,10 SAY "TYPE IN ITEM CODE NUMBER OR [Q] TO QUIT--"
@8,50 GET MCODE
READ
IF MCODE='Q'
CLEAR
RETURN
ENDIF
CLEAR
DO WHILE .T.
@2,12 SAY "INTERCITY BANK PLC H/Q MINNA"
@3,3 TO 22,70 DOUBLE
@5,13 SAY "ENTRY OF SALES"
@5,30 SAY DATE()
@8,4 SAY "TYPE IN ITEM CODE NUMBER:"
@10,4 SAY "TYPE IN ITEM CATEGORY:"
@12,4 SAY "TYPE IN QUANTITY IN STOCK:"
@14,4 SAY "TYPE IN ITEM DESCRIPTION:"
@16,4 SAY "TYPE IN QUANTGITY ISSUED:"
@18,4 SAY "TYPE IN SELLING PRICE PER-UNIT:"
@20,4 SAY "TYPE IN DATE ISSUED:"
@8,35 GET MCODE
@10,35 GET MCAT PICT "@!"
*@12,35 GET MQ STOCK PICT "999999"
@14,35  GET     MDESCRIP PICT "@!"
@16,35  GET     MQ_ISSUED PICT "999999"
@18,35  GET     MSELPRIC PICT "999999.99"
@20,35  GET     MIDATE PICT "99/99/99"
READ
USE INVENT
LOCATE ALL FOR CODE = MCODE
STORE BSTOCK TO MQ_STOCK
SET ESCAPE ON
ANSWER=' '
@22,35 SAY "ARE ALL ENTRIES CORRECT"
@22,60 GET ANSWER PICT "@!"
READ
IF UPPER(ANSWER)='N'
LOOP
```

```
ENDIF
*IF UPPER(ANSWER)='Y'
USE SALES
APPEND BLANK
REPL    CODE WITH MCODE
REPL    CAT WITH MCAT
REPL    Q_STOCK WITH MQ_STOCK
REPL    BSTOCK WITH MQ_STOCK - MQ_ISSUED
REPL    DESCRIP WITH MDESCRIP
REPL    Q_ISSUED WITH MQ_ISSUED
REPL    SELPRIC WITH MSELPRIC
REPL    TSELPRIC WITH MQ_ISSUED*MSELPRIC
REPL    I_DATE WITH MIDATE
CLEAR
USE     INVENT
*APPEND BLANK
LOCATE FOR MCODE=CODE
IF found()
MBSTOCK=MQ_STOCK - MQ_ISSUED
MTSALE=MQ_ISSUED*MSELPRIC
MBSALE=MTSELPRIC - MTSALE
REPL  CODE WITH MCODE
REPL  CAT WITH MCAT
*REPL   Q_STOCK WITH MQ_STOCK
REPL  DESCRIP WITH MDESCRIP
REPL    Q_ISSUED WITH MQ_ISSUED
REPL  SELPRIC WITH MSELPRIC
*REPL IDATE WITH MIDATE
REPL    BSTOCK WITH MBSTOCK
REPL    TSALES WITH MTSALE
REPL    TSELPRIC WITH MTSELPRIC
REPL    BSALE WITH MBSALE
ENDIF

*MCODE=SPACE(4)
*ENDIF

*ENDIF
EXIT
ENDDO
ENDDO
RETURN

PROCEDURE HEADING
parameter kk
?
?       space(17),"*    INTERCITY BANK, PLC."
?       space(17),"*    MINNA, NIGER STATE"
? space(17),"* INTERNAL STOCK/INVENTORY CONTROL SYSTEM"
?

IF KK = 1
?       space(28),"************************"
?       space(28),"* SUMMARY OF SUPPLY *"
?       space(28),"************************"
?       SPACE (3) , REPLICATE ("*",70)
?        SPACE(3),"* ITEM *                    * QTY. IN * QTY.    *        UNIT
DATE"
?        SPACE(3),"* CODE *       DESCRIPTION  * STOCK   * RECEIVE *        COST
RECEIV"
```

```
? SPACE(3),REPLICATE("*",70)
ENDIF
IF KK = 2
?       space(28),"************************"
?       space(28),"* SUMMARY OF INVENTORY *"
?       space(28),"************************"

?       REPLICATE ("*",78)
?       "ITEM *              *QTY. IN * QTY.    * QTY.    * TOTAL *    TOTAL"
?       "CODE * DESCRIPTION  * STOCK  * RECEIVE * ISSUED * STOCK *     COST"
?       REPLICATE("*",78)

ENDIF
IF KK = 3
?       space(28),"************************"
?       space(28),"* SUMMARY OF SALES      *"
?       space(28),"************************"

?       REPLICATE ("*", 78)
?       "* ITEM *             * QTY. IN * QTY.    *SELLING * TOTAL *     TOTAL"
?     "* CODE * DESCRIPTION * STOCK   * ISSUED * PRICE  * STOCK *     SALES"
?     REPLICATE ("*", 78)
ENDIF
RETURN


PROCEDURE SUPREPT
define window user from 1,1 to 22,78 none color W+,B
activate window user
set stat off
set alternate to 'supl.out'
set device to screen
set alternate on
set space on
DO HEADING with 1
store 1 to couter
use supply
go top
do while .not. eof()

? space(3),'|',code,'|',descrip,'|',str(q_stock,6),'|',str(q_rec,6),'|'
?? str(cost,8,2),'|',r_date,'|'
couter = couter + 1

? space(3),replicate ('-',70)
skip
enddo
?
set alternate off
wait
close data
deactivate window user
return


PROCEDURE INVREPT
define window user from 1,1 to 22,78 none color W+,B
activate window user
set stat off
set alternate to 'sup2.out'
set device to screen
```

```
set alternate on
set space on
DO HEADING with 2
store 1 to couter
use invent
go top
do while .not. eof()
? '|',code,'|',descrip,'|',str(q_stock,6),'|',str(q_rec,6),'|'
?? str(q_issued,7),'|',str(bstock,7),'|',str(tcost,9,2),'|'
couter = couter + 1
? replicate ('-',78)
skip
enddo
?
set alternate off
wait
close data
deactivate window user
return

PROCEDURE SALREPT
define window user from 1,1 to 22,78 none color W+,B
activate window user
set stat off
set alternate to 'sup3.out'
set device to screen
set alternate on
set space on
DO HEADING with 3
store 1 to couter
use sales
go top
do while .not. eof()
? '|',code,'|',descrip,'|',str(q_stock,6),'|',str(q_issued,6),'|',
?? str(selpric,8,2),'|',str(bstock,7),'|',str(tselpric,9,2),'|'
couter = couter + 1
? replicate ('-',78)
skip
enddo
?
set alternate off
wait
close data
deactivate window user
return
```

□