

AUTOMATED ACCOUNTING IN AIR TRAVEL AGENCIES

A CASE STUDY OF CLASSIQUE AIR SERVICE LIMITED KANO.

BY

EMMANUEL JOHNSON

PGD/MCS/99/2000/900

DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE.

FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA

SEPTEMBER, 2001.

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A PROJECT SUBMITTED TO THE

DEPARTMENT OF MATHEMATICS/COMPUTER SCIENCE.

FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA

NIGER STATE.

**IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE
AWARD OF THE POST GRADUATE DIPLOMA (PGD)
IN COMPUTER SCIENCE.**

SEPTEMBER, 2001.

CERTIFICATION

This is to certify that this project is carried out by Emmanuel Johnson (PGD/MCS/99/2000/900) in partial fulfillment for the award of postgraduate Diploma (PGD) in computer science, Federal University of Technology, Minna.

.....

DR. S. A REJU
(PROJECT SUPERVISOR)

.....

DATE

.....

DR. S. A. REJU
(HEAD OF DEPARTMENT)

.....

DATE

.....

EXTERNAL EXAMINER

.....

DATE

DEDICATION

To my wife Mrs Fati Emmanuel Johnson and my daughters Precious and Bernice Johnson.

To you, for all the strength you gave, for every dream you make come true.

ACKNOWLEDGEMENT.

I will extol thee o God for thou has lifted me up and has not made my foes rejoice over me. I thank thee God for you are the giver and sustainer of my life.

I am highly indebted to my able supervisor Dr. S. A. Reju for his pain staking guidance and suggestions.

To my lecturers in the Department. Your contributions, criticism nay assistance in my educational development will forever remain ever green in my mind, I thankn you all.

I must through this medium express my profound gratitude to the executive Governor of Niger state His excellency Engr. A. A. Kure for his moral, financial and fatherty support May God reward you richly. Special thanks also to Alhaji I. I. Salihu (ASP) the ADC to the executive Governor of Niger State for all his support and allowing me to grow ... thank you sir.

Words certainly is inadequate to express my profound gratitude to my friends, relatives and academic mentors who had contributed in one way or the other to make this career a success. I thank you all, most especially Mr. Collins Kpanga, Mr. Ado Aminu (ASP, Miss Bose Philip, Miss Edith Emabino and Miss Yemi Oyediran to mention but few.

Thank you is an inadequate phrase to convey my gratitude to Mallam Suleiman Oyeniya Bello, Prof. M. A. Daniyan, Mr. Kolo Emmanuel, Engr. D. A. Emmanuel.

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My gratitude to my parents for all their support may God bless you.

Finally, my highest and unreserved appreciation to a rare gem; my wife Mrs. Fati Emmanuel for her support and encouragement, thank you.

ABSTRACT

This project work is based upon studies of accounting and record keeping system in travel agencies and how it can be computerized. The various records kept by the travel agencies are analysed.

A program to ensure the easy and proper documentation of the monthly transaction of a travel agency was developed; the program is tested and found to be error free.

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CHAPTER ONE

1.0 INTRODUCTION TO TRAVEL AGENCY OPERATIONS

1.1 GENERAL INTRODUCTION

The main operations of Air travel Agencies revolves around the reservation of seat for travelers and the selling of Airlines air ticket.

On sales made, an agreed percentage is deducted and this is referred to as the sales commission. Therefore, the total is being remitted to the Airline. The major source of income of the Travel Agency comes from the sales commission, which at present is at 9% on the actual ticket fare.

All the sales commission receivable by the Travel Agency from airlines is subject to certain percentage of withholding tax due to Federal Board of Inland Revenue.

At present the withholding tax is fixed at 10%. Some of the Airlines collect this withholding tax from travel agencies via sales remittance, while others require travel agents to make draft or certified cheque payments directly to the Federal Board of Inland Revenue.

For accurate and easy access to financial information by the operators and other interested parties the operations of the travel agency is done base on financial record keeping and accounting system suitable for Air Travel Agencies.

1.2 INTRODUCTION TO CLASSIQUE SERVICE LIMITED.

Classique Air service Limited was incorporated on the 1st November 1992 with its office situated at Angwa Seriki Kano.

The authorized share capital of the company stood at 2000 000 ordinary shares of N1.00 per share. Out of which 1000,000 shares were issued to Directors/shareholders at per. The issued shares were all allocated to the shareholders and are paid for.

On the 28th of December 1992 the company obtained its International Airline Transports Association (IATA) license and commenced business in January 1993, the company's main business include reservation of seat and sales of airline air ticket.

The company has so far grown with branches in various parts of the country undergoing the same business objectives. Keeping records of transaction to be furnish to the headquarter at Kano.

Although, Classique Air service Limited is a profit oriented organization with source of profit mainly from sales commission. It is a capital intensive and as such do not require much capital expenditure, any expenditure, capital or otherwise is to be restricted to those very essential and necessary to the day-to-day smooth operations of the agency.

The moment Classique Air Service Limited obtained its IATA license it has been empowered to hold numbers of flight stock. Holding of stock of any

airlines tickets depends on fulfillment of terms and conditionalities for keeping stock of tickets and making the appropriate sales remittance.

Classique Air Travel Limited actually holds stock for different air-lines, these tickets when collected from the various airlines are been kept securely and the movement of such tickets are been monitored carefully right from the time of being received by the agent till the time of their being issued and written to passengers or customers for money. Tickets duly validated and issue means money to both the Airlines and Travel Agency, based on this fact, the Classique Air Service makes proper air tickets stock recording and controlling these to be sure that validated tickets do not fall into wrong hands and for proper accountability, the organization therefore keep records that are of paramount important to record day to day transaction, involving the issuance of tickets, receipt and payment of cash and lodgments to bank.

1.3 OBJECTIVES OF THE STUDY.

The objectives of this project are not only on improving the record keeping formats, its preparation and presentation but also on how the Account keeping and its preparation could be computerized for easy presentation of accounts of Air Travel Agency. This is for the benefit of Directors, Operators, Management and Accounting Personnel of travel agencies and for the benefit of those who wish to come into the business as air travel agents.

This project is aimed at providing a more accurate and faster way of presenting the account of Air Travel Agencies from the books of original entries to the final accounts. The benefits of automated accounting system in Air Travel Agencies include:

The retrieval and accessibility to accounting record also become easier.

The accounting activities become easier through the use of a program in the computer system.

CHAPTER TWO

2.0 TRAVEL AGENCY RECORDS AND ACCOUNT BOOKS.

There are many types of records and accounting books a Travel Agency may like to design and put out but this depends on the individual company. Here, emphasis is laid on the necessary records and the main books of accounts suitable to Air Travel Agency, by this we mean those records that are of paramount importance to record the day to-day transactions which involves the issues of tickets, control of ticket stocks, receipt and payment of cash and lodgments to banks.

2.1 TICKET ISSUE REGISTER.

Flight ticket duly validated by any (IATA). International Airline Transporter Association member means money to the Airline having such ticket and to the Travel Agent holding the stock. If such type of ticket enters into wrong hand and eventually used by any person to travel on any route through the air line, the travel agent which holds stock or validates such ticket will account and pay for it to the airline concerned.

The ticket issue register is thus used to control the issue of tickets and the particular of the passenger on whose name the travel document is written is recorded in the ticket issue register, also the ticket number, date of issue and the amount of fare paid on the ticket are also recorded in the register.

The ticket issue register is being used to cross check and account for the ticket actually issue out to passengers. This could be checked at the close of every day business.

Table 2.1 is a clear format of ticket issue register.

1. TICKET ISSUE REGISTER.

DATE	NAME OF PASSENGER	PASSPORT NO	ROUTE	TOTAL FARE	INN. NO	REMARK

2. TICKET STOCK CONTROL BOOK.

The purpose of this book is to record all tickets received from the airline and monitor their issuance to sale or ticketing department. These tickets when collected from the airline are to be kept securely, and the movements of the tickets are to be carefully monitored right from the time of their received by the agent till the time of their being issued and written to passengers or customer for money. The ticket stock control book and the ticket issued register show the actual ticket received from the airline and that issued to passengers.

Below is a format for ticket stock control book

DATE	TICKET NO	PASSPORT NO	CUSTOMER'S NAME	CASH INV.	CRDIT INV.	COLLECTED BY	REMARK

2.2 RECEIPT REGISTER

On sales of ticket or on money collected for the reservation of seats, the cashier takes charge of the money and thereafter the money is taken to bank. This transaction is recorded on daily basis. This record should be closed and added up on daily basis at the close of the day's business. Although the main purpose of the receipt register is to take details of daily revenue received by the cashier and to act as a control to daily bank Lodgement report, which is been prepared by the cashier. The receipt register also help in the control of the issuances of revenue receipt and the monitoring of daily cash collection, the receipt register therefore serve as a strong internal control to the system of cash collection and subsequent bank Lodgement.

Below is the format for receipt register:-

2.3 RECEIPT REGISTER

DATE	PAYEE	RECEIPT NO	MODE OF PAYMENT	CHEQUE NO	AMOUNT	REMARK

2.3 DAILY BANK LODGEMENT RECORDS

The daily bank Lodgement record gives details of the total money received, receipted and finally lodges into Banks by the company's cashier.

The cashier prepares his Daily bank Lodgement records or statement from his receipt booklet and then sum up the amount which will have to agree with the figure taken to bank for Lodgement.

The account officers in the account department therefore cross check the record and then reconcile it with the receipt's register on daily basis, if there is difference, this indicate a problem of financial misappropriation.

Below is the format for daily Bank Lodgement records.

Table 2.4

DAILY BANK LODGEMENT RECORD.

DATE	RECEIVED FROM	PURPOSE	RECEIPT NO	AMOUNT	CASH	CHEQUE
	TOTAL LODGEMENT			#	#	#

BANKS.....

.....
 PREPARED BY: CHECKED BY:.....
 CASHIER ACCOUNTANT

2.4 BOOKS OF ACCOUNT.

There are many books of account kept by companies or organization for the day to day record of the transaction and to ensure that proper record keeping and accounting system to been maintained in the company. This is also applicable to the Air Travel Agency and in particular Classique Air Service Limited.

Among the important books kept by the organization include the following.

(i) PURCHASES DAY BOOK

The purchases daybook is an important book of original entries, it is required only when the transaction involve the purchase of goods or services.

(ii) MAIN CASH BOOK

The main cashbook records the receipts of cash payment received by the organization, this book also records the cash payment made out of the cash collected. The travel agents in most cases have cash involvements because more of their sales transactions are on cash basis.

The need for main cashbook is to record cash receipts and payments. The book records all cash and cheques coming into the company whether from sales of flight tickets, receipt of commission from airlines or other agents, payment for shares by the agency.

(iii) BANK CASH BOOK

The bank cashbook like any other cashbooks, records the money lodged with the company's bank account and the sum drawn from the bank accounts by means of cheque or any other written orders to the bankers.

The pay-in-slip (teller) is filled for every amount of cash or cheque intended for Lodgement with the bank. Thereafter the duplicate copy of the teller is used to record the receiving side of bank cashbook. Other documents used in the record of bank cash book includes cheque, debits or credit advice from banks and any formal letter signed by authorized signatories to the bank account, which may convey an order to the bank to effect transfer from or to the bank account.

At the end of every given period of time, two weeks, monthly or as it may be decided by the company, the bank cash is added up and the total of each column will be posted to the appropriate account in the General ledger. At the end of the given period or monthly, the bank cash book balance must be reconciled with the bank balance as per bank statement of account, the aim of this is to check and ensure that Lodgement into the bank account and withdrawals from it are correctly and accurately posted by the bank. If otherwise the bank is notified for correction or clarification.

2.5 FARE AND COMMISSION CALCULATIONS.

(i) FARE CALCULATIONS

Determination of correct fare to be paid by an intending passenger is paramount to flight ticket issued to the passenger. It is of utmost important to Classique Air Service Limited and even to all the travel agencies this is to ensure that correct fare is calculated and collected from the passengers before flight ticket are issued to them.

In the error of omission or commission, a travel agent under calculates and under states the fare on a passenger's ticket for a chosen route, the airline that own such ticket will hold the travel agent responsible and liable and must cause the agent concerned to pay the amount that is under charged.

Ticketing and reservation staff of travel agency does calculation of the fare. In calculating the fare, reference is been made to Airline Passenger's tariff (APT). The APT is a common tariff approved by International Airline Transporters' Association (IATA), the IATA is generally used by all airlines and travel agency worldwide to determine the ticket point mileage (TPM), the maximum permitted mileage (MPM) the surcharge points where applicable and then calculate the neutral unit of construction (NUC) which is always stated in 11.5 dollars.

The following steps are hereby suggested to ensure accurate and correct fare calculations for passengers prior to the issuance of the flight tickets.

a. Determine the route or routes



b. Get APT II & I



c. Check PTM or FM



d. Calculate PTM or FM for the route (s)



e. Check APT II for MPM



f. Compare TPM and MPM



g. If TPM is higher than MPM surcharge



h. Get actual MPM



i. Check APT11 for NUC and determine fare for the route.



j. Multiply the total sum of NUC by local exchange rate.



k. Get "Naira" value of the Actual Ticket far for the route.



l. Add 5% Govt. tax to the actual fare.



m. Total Amount in local currency payable by the PAX.

For clear understanding of these steps, calculation of the air flight fare for a passenger Mr. Adamu, wishing to travel from Kano to Amsterdam London Amsterdam and back to Kano is as follows. The fare in our local currency (Naira), will be determined base on the following relevant from the APT (Airline Passenger Tariff).

1. Ticket point mileage (TPM) is 3007
2. Maximum permitted mileage (mpm) is 3328
3. Neutral units of construction NUC is 7240.
4. Exchange rate (Naira per US dollar) is ₦ 100
5. Government tax is 5% on the Ticket value

Calculation of fare for Mr. Adamu.

ROUTE	TPM	MPM	NUC
KAN	1395		
AMS	1395		
LON	217		620
AMS			
KAN	<u>1395</u>		<u>620</u>
TOTAL	3007	3328 given	1240

Rate of exchange (ROE) in Naira...

Actual Ticket fax	27,280.00
Add 5% Govt. Tax	<u>1,364.00</u>
Amount payable by Adamu	<u>₦ 28,644.00</u>

In the calculation above it seems simple because the route do not involve surcharge due to the fact that the TPM is not greater than the MPM.

In a situation whereby the route involves where TPM is greater than MPM, there will be a surcharge, this rule is in APT1 and 11 and it is been determined by dividing TPM with MPM to get the point. This point will then be referred to surcharge table to determine the surcharge mileage and the NUC. Then local official exchange rate will be applied to convert the fare in Naira before adding government tax, which is 5% of the ticket value or actual fare.

For passenger Ado, wishing to travel from Kano to Amsterdam, Bangkok, Amsterdam, London, Amsterdam and back to Kano, the fare payable by him will be determined based on the following information obtained from APT: - MPM is 7417, TPM is 8493, exchange rate in Naira per US dollar is N100 and Government Tax still remains 5% of ticket value.

Calculation of fare Ado

ROUTE	TPM	MPM	
KAN-AMS	1395		
AMS-BKK-AMS	5269		
AMS-LON-AMS	434		
AMS-KAN	1395	7417	Given.
	<u>8493</u>	<u>7417</u>	

From the above the TPM is greater than MPM; the surcharge would be determined by dividing TPM with MPM.

That is $\frac{8493}{7417} = 1.15$ points.

Check the surcharge table on the last page of APT1 or APT11, get the mileage or percentage which will be added to the NUC fare for the route before ruling exchange will be applied to convert the fare into local currency. As for the above given route. KAN-AMS-BKK, have surcharge of 15%, which attract NUC fare of N159.45, then BKK-AMS-LON-AMS-KAN have surcharge of 25% which attracts NUC fare of N 265.75, that is NUC fare for the route multiply by 25%.

The total amount payable by the passenger for the route is thus calculated. International flight fare calculations really involve some mathematics but a well-trained person in air ticketing and reservation can handle it very well.

(ii) CALCULATION OF SALES COMMISSION.

Sales commission is the main revenue or income of a travel agency. At present all air ticket sold by any (IATA) International Airline Transportation Association approved Travel Agent is subject to 9% commission to the agent. This 9% commission is calculated on the actual ticket fare for the given route covered by ticket fare. The commission is deducted at source by travel agents when making sales reports and remittance to Airlines.

For illustration purpose the actual ticket fare of N27,280.00 calculated for Mr. Adamu earlier will give a revenue of N2,455.20 to Classique Air service or any Air Travel Agency that will sell the ticket to Mr. Adamu, that is, $\text{N}27,280.00 \times 9\% =$

N 2,455.20.

(iii) COMMISSION TO SUB-AGENT AND ON CASH SALES.

To encourage prompt payments and cash sales, commission are allowed to sub-agent and on cash sales. This commission given to sub-agent is been deducted from the 9% sales commission, which Travel Agent received from agency revenue.

Travel agents should guide against reckless giving of commission to customers. They should ensure that commission allowed to customer in any transaction do not exceed 4% of actual ticket value or 40% of the 9% due to agent from Airline, otherwise the agent end up gaining less or about 50% of the 9% commission, hence 10% of the commission is deducted at source from the 9% sales commission for withholding tax to Federal Board of Inland Revenue.

(iv) COMMISSION TO SALE REPRESENTATIVES.

The management as one of its marketing policies established the given of commission to sale representative or even to other staff of the organization in order to increase revenue thereby increasing the organization's profit.

It is not out of place to do the same in the travel agency, i.e. offering commission to various sales representatives provided the rate of commission given to all categories of sales representatives must be uniform to avoid possible manipulations of same to defraud the company.

All persons entitle to sales commission, and terms and rate of commission due to them must be communicated as soon as possible to the account department in writing. The Agency Manager and the Accountant keep the activities of sales representatives under strict scrutiny. Asking the sales representatives to report directly to the Agency manager their daily sales, the Agency manager in turn report to the Accountant also on daily basis.

Assuming that the sales for the fare calculated for Adamu was made by a sales representatives where the sales representatives is entitled to 1% of every sales he/she made, the calculation is thus calculated.

Value of the ticket	27,280.00
add 5% Govt. tax	1,364.00

Sales commission to the representative = 1% of the ticket value which is

$\text{N } 27,280.00 \times 1\% = 272.80$

The sales representative commission is calculated base on the total value of the ticket less Government tax element.

However, all sales commission receivable by travel agents from airlines is subject to 10% withholding tax due to the Federal Board of Inland Revenue. Some airlines collects this Board with-holding tax from travel agents, at source via the sales reports and sales remittance, while others require draft or certified cheque payments directly to Federal Board of Inland Revenue by the travel agents.

In situation whereby a ticket is refunded the 9% commission due to the travel agent on sales of the ticket will be recalled back and deducted from subsequent sales commission due to the travel agent, also the 10% withholding tax to Federal Board of Inland Revenue will be recalled and deducted from any subsequent or current withholding tax due to the Federal Board of Inland Revenue FBIR.

2.6 REFUNDS AND SALES REPORT.

(1) Refund

In the normal course of transacting business, Customers buy tickets which may either be on cash or credit but mainly on cash basis, these same customer may turn round later to return their tickets as unused and will demand for refunds, the amount of refund they are entitled to claim will depend on the nature and class of the ticket(s).

In a situation whereby the ticket has not been used for any travel at all then the customer will be entitled to the fare value of the ticket less the commission previously allowed to the customer if there is any, services charge or cancellation charge and any other genuine deduction from the ticket value. Where the ticket has been partially used, the customer shall only be entitled to a refund of the fare value of the ticket, less the commission previously allowed, Government tax.

In some cases ticket is been return in exchange for another Airlines ticket, in this type of situation the amount of refund to be claim by the customer will depend on the following transaction: -

- (1) If the former ticket cost more than the present one, the difference between the two tickets and vice versa shall the customer be entitled to.
- (2) Where a customer returns his or her ticket merely to change his/her ticket from one route to another, the customer may or may not be entitled to a refund, but this depends on the circumstances of his or her returns.

Where a customer returns a ticket in exchange for a new ticket of the same airline or that of another airline, the customer may or not be entitled to refund depending on the circumstances of the case.

At the end of a given period the refund book will be closed and added up and thereafter analyzed.

However, the net refund due to the agent from the airlines are deducted from any net sales amount due to the airlines within the same period or from any subsequent net sales.

(2) SALES REPORT.

This conveys information about the sales of tickets made by travel agents to the airlines concern. This report is prepared to cover sales made by the travel agents in given period, this could be monthly or half monthly or as agreed with the various airlines concerned. In the sales summary, the travel agency is required to deduct the sales commission due from the actual

ticket fare, government tax and net refund are thus deducted where applicable in arriving at the balance to be remitted to the airline.

CHAPTER THREE

1.0 TRAVEL AGENCY OPERATIONS SYSTEM DESIGN

3.1 DATA FOR ACCOUNTS OF TRAVEL AGENCY.

Haven discussed the essential books of accounts and records that are of paramount importance to the day-to-day transaction of the Air travel agencies, the true data gathered from transaction of Classique Air Service limited, Kano, for the month of January 2001 make up the data for preparation of the Accounts.

Below are the available data of Classique Air Service Limited for Account purpose.

Details of credit sales in January 2001

Date	Particulars	Invoice	Ticket No	Amount	Airline
03/1/2001	MUSA ISA	0200	PG2347	56,800.00	BA
04/1/2001	TOBI ISA	0201	PG2348	66,800.00	SV
05/1/2001	ISA NAYAA	0202	PG2349	56,800.00	BA
06/1/2001	MUSA ISA	0203	PG2350	66,800.00	SV
07/1/2001	TOBI YISA	0204	PG2351	76,800.00	WT
08/1/2001	EMMANUEL J.	0205	PG2352	86,800.00	WT
10/1/2001	UMORU HASSAN	0206	PG2353	96,800.00	SV
11/1/2001	YAU KAITA	0207	PG2354	37,257.00	BA
12/1/2001	IRO MOHAMMED	0208	PG2355	17,253.00	SV
13/1/2001	ALH. J. NGUGOMA	0209	93340	51,759.00	SV

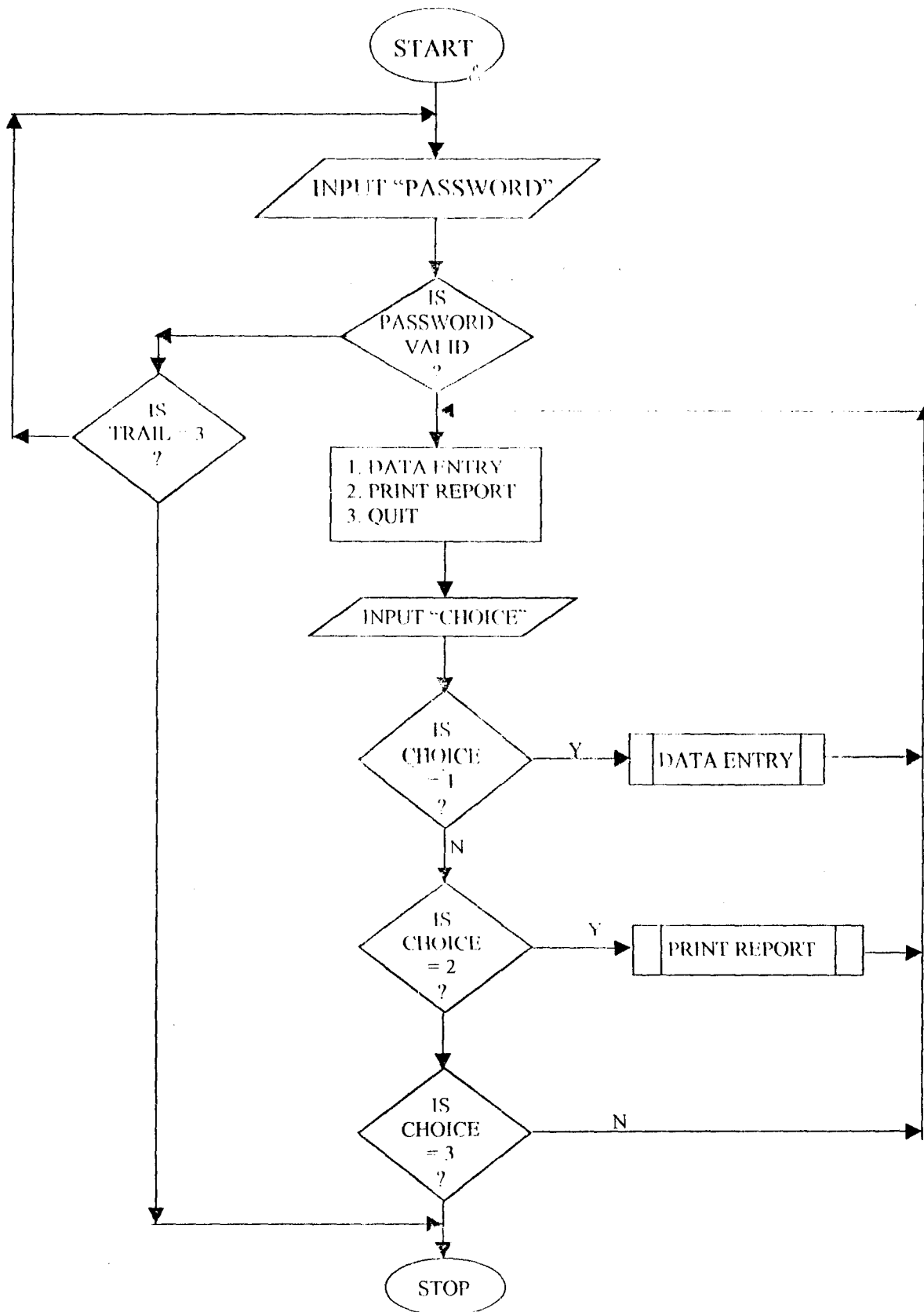
14/1/2001	ALH. G. DUTSE	0210	93341	114,181.00	WT
19/1/2001	ALH. K. KALE	0211	93342	60,000.00	WT
25/1/2001	ALH. SALEH IDRIS	0212	93343	34,506.00	SV
29/1/2001	DAMCO B. D/CHARGE	0213	93344	28,640.00	BA
30/1/2001	YAU KAITA	0214	93345	37,257.00	BA
30/1/2001	KACHALLA MOH'D	0215	93346	28,644.00	WT

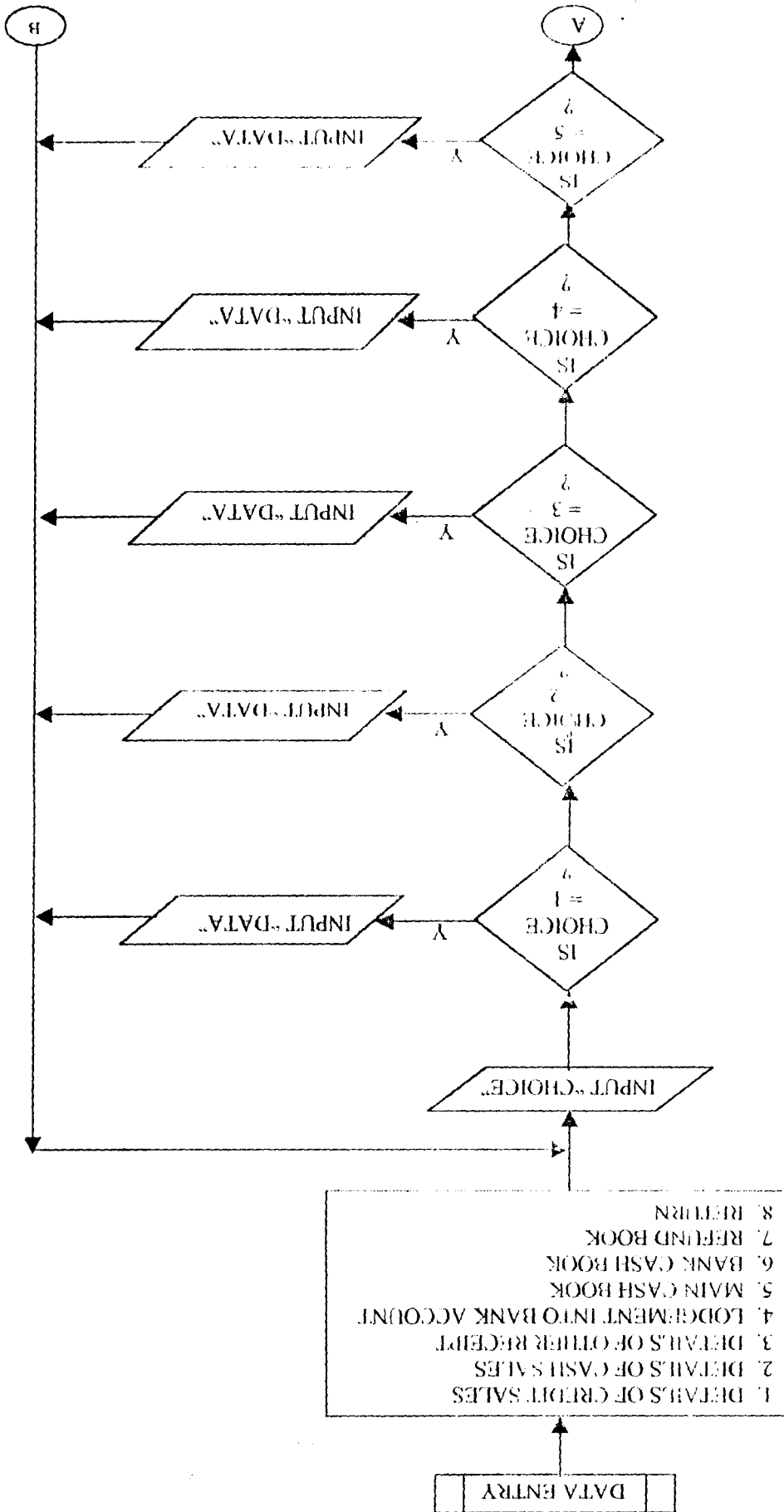
Details of cash sales in January 2001

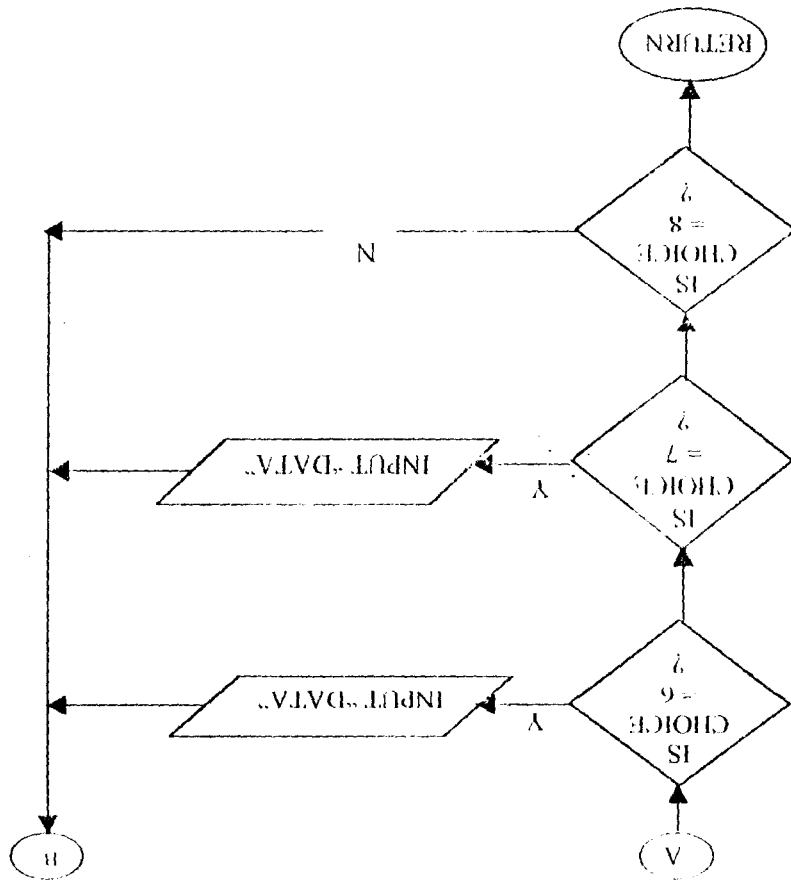
Date	Particulars	Invoice	Ticket No	Amount	A/Line
03/01/2001	SULEMAN MOHAMMED	201	Q92123	115,184.00	SV
04/01/2001	MUSA ADAMU	202	Q92124	17,253.00	SV
05/01/2001	EZE CHRISTIAN	203	Q92125	36,973.00	KLM
06/1/2001	USMAN ALE	204	Q92126	120,771.00	SV
07/1/2001	MUSA GIBO	205	Q92127	15,000.00	KLM
08/01/2001	TAHIR ABDULLAHI	206	PQ92352	36,973.00	BA
09/1/2001	HARUNA ABDULLAHI	207	PQ 92353	56,272.00	BA
09/1/2001	SULEMAN MOH'D	208	Q92128	24,667.00	WTS

3.2 ALGORITHMS OF PROGRAM

The algorithm of program used in this project is as drawn bellow: -

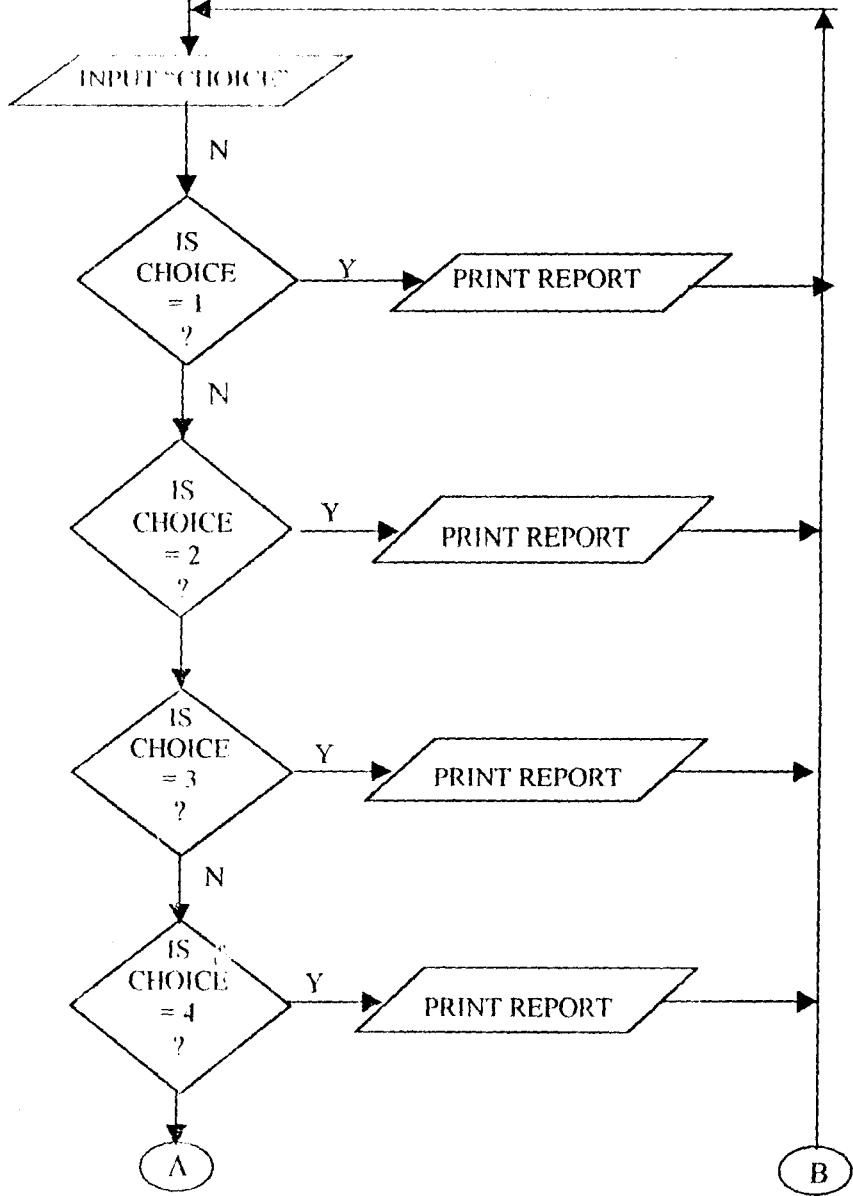


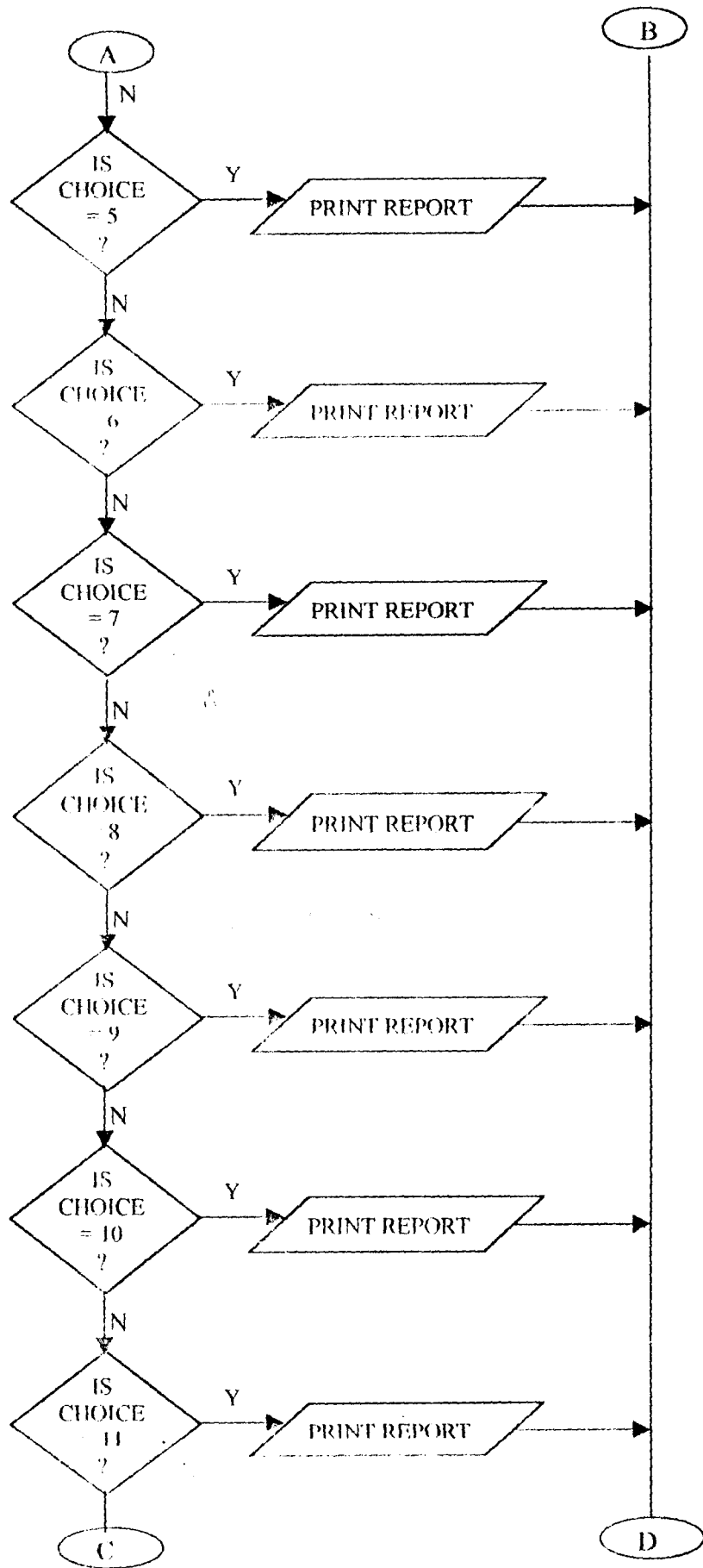


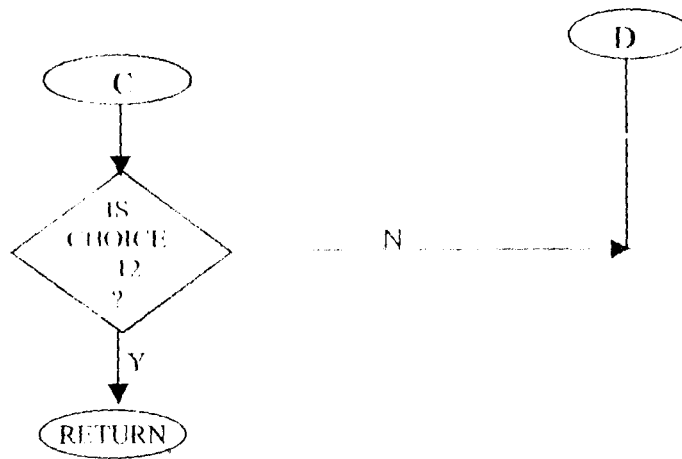


PRINT REPORT

1. DETAILS OF CREDIT SALES MONTHLY REPORT
2. DETAILS OF CASH SALES MONTHLY REPORT
3. DETAILS OF OTHER RECEIPTS MONTHLY REPORT
4. LODGEMENT INTO BANK ACCOUNT MONTHLY REPORT
5. PAYMENT VIA BANK ACCOUNT MONTHLY REPORT
6. PAYMENT VIA CASH BOOK MONTHLY REPORT
7. CREDIT SALES DAY BOOK MONTHLY REPORT
8. CASH SALES DAY BOOK MONTHLY REPORT
9. MAIN CASH BOOK MONTHLY REPORT
10. BANK CASH BOOK MONTHLY REPORT
11. REFUND BOOK
12. RETURN







3.3 SYSTEM DESIGN

System design is the use of programmer's creative ability and sense in organizing a logical but literally feasible procedure for a computerized system.

The system design also provides detailed documentation of the entire system. Specifically the design stages of this software would produce output as follows: -

3.3.1 GENERAL SYSTEM DESIGN:

The general system design includes the flow chart (procedure) and a written explanation (Pseudocode).

For this study, coding (programming) is used to depict the representation of the project. This is available in appendix A.

3.3.2 DATA BASE DESIGN

Database design, which is also know as file design, is the denominator of any system. It contains the raw material (Data) necessary to produce output.

Database file used design includes the entire database files used throughout the system for proper storage of the course processing data. Below are the physical descriptive structures of the database files used.

TCREDIT. DBF

NAME	TYPE	WIDTH	DECIMAL	INDEX
Mdate	Date	-	-	
Part	Character	-	-	
Invoice	Character	-	-	
Ticknum	Character	-	-	
Amt	Numeric	2	-	
Aline	Character	-	-	
Gt	Numeric	2	-	
Commrec	Numeric	2	-	
Trade	Numeric	2	-	
Wtax	Numeric	2	-	

TMAINCASH. DBF

NAME	TYPE	WIDTH	DECIMAL	INDEX
Mdate	Date	8	-	-
Part	Character	25	-	-
Receiptnum	Numeric	6	0	-
Totanet	Numeric	15	2	-
Cashsal	Numeric	12	2	-
Sharecapt	Numeric	15	2	-
Debtcontr	Numeric	12	2	-

Commrec	Numeric	12	2	-
---------	---------	----	---	---

TREFUND. DBF

NAME	TYPE	WIDTH	DECIMAL	INDEX
Mdate	Date	8	-	-
Custname	Character	25	-	-
Retinv	Numeric	5	0	-
Ticknum	Character	25	-	-
Totanet	Numeric	15	2	-
Recacomm	Numeric	8	2	-
Rectax	Numeric	8	2	-
Sc	Numeric	8	2	-
Recall	Numeric	15	2	-
Cash	Numeric	15	2	-
Drc	Numeric	15	2	-
Aline	Numeric	12	2	-

3.3.3 INPUT DESIGN: -

The various Data input forms produced using the above database files structures are below:

- 1) Details of credit sales
- 2) Details of cash sales
- 3) Payment via Bank Account
- 4) Payment Via cash Book

Welcome to
AUTOMATED ACCOUNTING IN AIR TRAVEL AGENCIES.
(A Case Study of Classique Air Services Ltd, Kano.)

A project developed by:
EMMANUEL JOHNSON

PGD/MCS/99/2000/900

MATHS/COMPUTER SCIENCE DEPARTMENT
FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA
IN PARTIAL FULFILMENT FOR THE REQUIREMENT FOR THE AWARD OF
POSTGRADUATE DIPLOMA IN COMPUTER SCIENCE.

LOGIN FORM

Enter your User Name and Password

User Name	<input type="text"/>
Password	<input type="password" value="***"/>

Data Entry Print Report Quit

- Details of Credit Sales
- Details of Cash Sales
- Payment via Bank Account
- Payment via Cash Book
- Details of Other Receipts
- Lodgement into Bank Account
- Bank Cash Book
- Refund Book

Data Entry Print Report Quit

- Details of Credit Sales Monthly Report
- Details of Cash Sales Monthly Report
- Details of Other Receipts Monthly Report
- Lodgement into Bank Account Monthly Report
- Payment via Bank Account Monthly Report
- Payment via Cash Book Monthly Report
- Credit Sales Day Book Monthly Report
- Cash Sales Day Book Monthly Report
- Main Cash Book Monthly Report
- Bank Cash Book Monthly Report
- Refund Book

PARTICULARS	TOBI ISA		
DATE	04/01/2001	GOVERNMENT TAX	
INVOICE NUMBER	0201	COMMISSION	
TICKET NUMBER	P92348	W/H TAX	
AMOUNT	86800.00	TRADE CREDITORS	
AIR LINE	SV		

<u>A</u> dd New	<u>M</u> odify	<u>D</u> elete	<u>C</u> lose
-----------------	----------------	----------------	---------------

<u>F</u> irst	<u>N</u> ext	<u>P</u> revious	<u>L</u> ast
---------------	--------------	------------------	--------------

PARTICULARS	Musa Adamu		
DATE	04/01/2001		
INVOICE	202	COMMISSION ALLOWED	
AMOUNT	17253.00	GOVERNMENT TAX	
TICKET NUMBER	Q92124	COMMISSION	
AIR LINE	SV	W/H TAX	
CASH SALES	0.00	TRADE CREDITORS	
SHARE CAPITAL	17253.00	NEW TOTAL	
DEBTORS CONTROL	0.00		
COMM. RECALLED	0.00		

<u>A</u> dd New	<u>M</u> odify	<u>D</u> elete	<u>F</u> irst	<u>N</u> ext	<u>P</u> revious	<u>L</u> ast	<u>C</u> lose
-----------------	----------------	----------------	---------------	--------------	------------------	--------------	---------------

PAYMENT VOUCHER

DATE 01/04/2001
PARTICULARS COST OF OFFICE EQUIPMEN
PAYMENT VOUCHER NUMBER 002
CHEQUE NUMBER RS98913
AMOUNT 400000.00

<u>A</u> dd New	<u>M</u> odify	<u>D</u> elete	<u>C</u> lose
<u>F</u> irst	<u>N</u> ext	<u>P</u> revious	<u>L</u> ast

PAYMENT VOUCHER

PARTICULARS LODGEMENT TO BANK
Date 01/04/2001
PAYMENT VOUCHER NUMBER 0102
AMOUNT 4000.00

<u>A</u> dd New	<u>M</u> odify	<u>D</u> elete	<u>C</u> lose
<u>F</u> irst	<u>N</u> ext	<u>P</u> revious	<u>L</u> ast

DATE 01/04/2001
PARTICULARS MUSA GIBO FOR SHARES
RECEIPTS 104
AMOUNT 130000.00

<u>A</u> dd New	<u>M</u> odify	<u>D</u> elete	<u>C</u> lose
<u>F</u> irst	<u>N</u> ext	<u>P</u> revious	<u>L</u> ast

DATE 04/01/2001
PARTICULARS CASH LODGEMENT
BANK GTB
AMOUNT 6312.00

<u>A</u> dd New	<u>M</u> odify	<u>D</u> elete	<u>C</u> lose
<u>F</u> irst	<u>N</u> ext	<u>P</u> revious	<u>L</u> ast

01/04/2001 11:00:00

DATE	01/04/2001
PARTICULARS	COST OF OFFICE SAFE
AMOUNT	122658.00
CASH BOOK	122658.00

<u>A</u> dd New	<u>M</u> odify	<u>D</u> elete	<u>C</u> lose
<u>F</u> irst	<u>N</u> ext	<u>P</u> revious	<u>L</u> ast

CUSTOMERS NAME	EZE CHRISTIAN		
REFUND INVOICE	2	DATE	04/01/2001
TICKET NUMBERS	GT92124		
SERVICE CHARGE	1458.00	RECALLED COMMISSION	
RECALLED COMM./ALLOWED	1000.00	RECALLED W/TAX	
TOTAL AMOUNT	30612.00	AIR LINES	

<u>A</u> dd New	<u>M</u> odify	<u>D</u> elete	<u>C</u> lose
<u>F</u> irst	<u>N</u> ext	<u>P</u> revious	<u>L</u> ast

- 5) Details of other receipts
- 6) Lodgement into Bank Account
- 7) Bank cash Book
- 8) Refund Book

TACC.DBF

NAME	TYPE	WIDTH	DECIMAL	INDEX
Mdate	Date	8		-
Part	Character	30	-	-
Voucnum	Character	8	-	-
Chqnum	Character	12	-	Ascending
Amt	Numeric	15	2	-
Date2	Date	8	-	-
Part2	Character	25	-	-
Amt2	Numeric	15	2	-
cashbk	Numeric	15	2	-

TBANK.DBF

NAME	TYPE	WIDTH	DECIMAL	INDEX
Mdate	Date	8	-	-
Part	Character	40	-	-
Bank	Character	20	-	-
Amt	Numeric	15	2	-

TBOOK.DBF

NAME	TYPE	WIDTH	DECIMAL	INDEX
Mdate	Date	8	-	-
Part	Character	3	-	-
Voucnun	Character	6	-	-
Amt	Numeric	15	2	-

TCASH.DBF

NAME	TYPE	WIDTH	DECIMAL	INDEX
Mdate	Date	8	-	-
Part	Character	25	-	-
Invo	Character	10	-	-
Ticknum	Character	18	-	-
Amt	Numeric	12	2	-
Aline	Character	10	-	-
Gt	Numeric	8	2	-
Common	Character	8	2	-
Htax	Character	6	2	-
Trade	Numeric	15	2	-
Commall	Numeric	8	2	-
Date2	Date	8	-	-
Part2	Character	25	0	-
Receipt	Numeric	6	-	-
Amt2	Numeric	15	2	-
Ntot	Numeric	12	2	-
Cscales	Numeric	12	2	-
Shares	Numeric	12	2	-
Debtors	Numeric	12	2	-
Commrec	Numeric	12	2	-

3.4 CHOICE OF PROGRAMMING LANGUAGE USED

The proposed system is going to be used to storing large number of data/ information and time-to-time retrieval of record is perform. Due to this fact, the choice of the programming language chosen for the development of the system is database Management system (DBMS) package with special preference for Visual FoxPro.

3.5 FEATURES OF THE PROGRAMMING LANGUAGE USED.

Visual FoxPro is selected as the choice of programming language because of the following features and reasons.

- 1) It is easy to write an interactive user interface program and also simple to understand.
- 2) It is users friendly.
- 3) It reduces data redundancy.
- 4) Data integrity can be maintained.
- 5) Provides easy and greater access to information
- 6) Individual database file can be designed to meet specification requirement of a particular functional unit of an organization.
- 7) The Visual FoxPro allows the source program to be compiled to an executable file thereby allowing the program to be run independent of the application software that was used in coding the program for example, Visual FoxPro.
- 8) It has quality graphical users interface.
- 9) It is easy to maintain and to debug; it has debugging tools.

CHAPTER FOUR

4.0 IMPLEMENTATION

4.1 SYSTEM IMPLEMENTATION

System implementation is a broad term that encompasses testing and debugging hardware and software requirement.

System installation and conversion

It is also the coordination of the facts that is necessary in ensuring the operation of the new system.

4.2 SYSTEM TESTING AND DEBUGGING.

The essence of program testing is to make sure that program is error free and that all the logic involved are well defined and straight forwards. However, it is often seen as a means of establishing that a program is error free and that it does what is required.

It is virtually impossible to test a program so thoroughly that it can be claimed to be completely free of errors, therefore, it is more realistic to think of testing as a "process of finding error". When a stage is reached, and the program appears to run perfectly this does not means there are no more errors in the program, it simply means that those errors have not been discovered.

Hence, this software has been developed tested with real live data, Irrespective of people and environment and it was found to be error free.

4.3 HARDWARE AND SOFTWARE DEVELOPMENT

To make maximum utilization of the developed system, certain hardware and software need to be installed.

4.3.1 HARDWARE REQUIREMENT

Hardware: This is the physical components of the computer system i.e computer peripherals. The following are the recommended specification, which if adhered to would produce the best result, and the system will be free from errors/faults: -

- ❖ Monitor (display)
- ❖ Keyboard
- ❖ Mouse
- ❖ Hard disk UPS (uninterruptible power supply)
- ❖ System unit which comprises of: -
 - i System case (chassis)
 - ii. Motherboard (system board)
 - iii Microprocessor
 - iv Memory (RAM)
 - v. Power supply
 - vi. Floppy drive

Vii Hard drive

Viii CD –Rom drive.

4.3.2 SOFTWARE REQUIREMENT

Software requirement are the basic and relevant application software that is needed to be installed on the computer system in order to make maximum utilization of the computer system and the developed software. It is because of this fact that the following software must be installed on the system.

The software includes: -

- (a) Operating system software (Window 98 or 2000)
- (b) Designed software such as: -
 - (i) Office 2000 viz: Ms word, Ms excel, Ms power point.
 - (ii) Visual Studio specifically Visual FoxPro.

4.4 PROGRAMING INSTALLATION

This is the process of transferring the developed software from the floppy disk to a permanent storage device called the Hard disk.

However, due to vast improvement in recent operating systems, the installation of the software is a very simple operation. The steps involved in the procedure are as follows: -

STEPS	PROCEDURE	RESULT
1. Go to start	Click	Start popup menu is displayed.
2. Run submenu	Click	Run dialog box displayed
3. Insert air travel software diskette into A:\	-	-
4. Type the source drive (A:\)	Browse	Content of A:\ displayed
5. Select set-up	Double – click	Installation begins
6. Follow the instruction that Follows	Click	Installation in progress
7. Destination	-	Software installed C:\ successfully

CHANGING THE SOFTWARE FROM C:\ TO WINDOW PROGRAM SUBMENU

STEPS	PROCEDURE	RESULT
1. Go to start	Click	Start popup menu displayed
2. Setting submenu	Click	-
3. Choose taskbar & start menu	Click	Taskbar dialog box
4. Select start menu program	Click	-
5. Browse to select AIR TRAVEL software	Double - click	-
6. Select folder (program)	Click	-
7. Destination	Click	AIR TRAVEL software copied into program submenu successfully.

4.5 PROGRAM OUTPUT/RESULT.

The output produced in this program is as follows: -

- (1) Details of credit sales monthly report.
- (2) Details of cash sales monthly report.
- (3) Details of other receipts monthly report.
- (4) Lodgement into Bank Account monthly report.
- (5) Payment via Bank Account monthly report.
- (6) Payment via cash monthly report.
- (7) Cash Sales Daybook monthly report
- (8) Details of Credit Sales monthly report.
- (9) Main Cash book monthly report.
- (10) Bank cash book monthly report
- (11) Refund book.

The printed hard copies of these outputs/results are as shown in Appendix B.

4.6 SYSTEM CONVERSION

Conversion could be refer to as the process of converting or changing old system to a new one. There are four various methods of conversion and they are as a follows:

1. **PARALLEL OPERATING METHOD:** - this is a system of conversion in which the new systems introduced is used along side with the old one, the old system thereafter phase out.

2. **PILOT APPROACH:** - a working version of the system is implemented in one part of the organization, changes are made based on the feedback, there after the new system is installed in the rest part of the organization.
3. **DIRECT CHANGEOVER:** -this is simply the total replacement of an existing system by the new one at once.
4. **PHASE –IN METHOD:** - this is the systematic way of changing from old to new. The new system is used in certain section of the organization in parallel with the old system, until it becomes effective on its own; again the same is done in another section. This process is repeated in all section of the organization until the entire organization is covered.

The conversion method that suggests being appropriate for the system developed for the transaction of Airline Agencies is parallel operation method.

This method is considered appropriate because from the observation of the records and account kept in the Agencies, there are various branch offices and agents who are involved in the transaction business of the agency, these agents and branch office do not prepare their final Accounts rather, the head office is charge with the preparation of the final Account, the account officers at the head office thus prepare the final account which is the trading, profit and loss Account on receiving reports of sales from the

various branch offices. It is therefore appropriate to use this method that is, using the new system along side the old system

CHAPTER FIVE

5.0 SYSTEM DOCUMENTATION AND CONCLUSION.

5.1 DOCUMENTATION: -This is referred to as the proper keeping of records for future use. The program used in computerizing the records and Account of the Air Travel Agencies need to be properly documented, this is so because accounting itself is concerned with the use to which records are put, their analysis and interpretation.

Documentation is also important because where there is proper record, when the initial programmer is not available any other programmer can get into the source code to make any necessary amendment.

Considering the method of conversion which is the parallel method, as technology develops, there may be need to modify or add one or two things into the source code so that it can do more than the recording and printing of report. Proper documentation will make the work of a programmer easier. Sample of work done and the installation diskette should be properly kept as well.

The main importance of the installation diskette is to enable one introduce a particular program into a system that does not have the programming language in use; documentation allow proper reference to be made.

5.2. RECOMMENDATION.

As a management function, control is the process of taking the necessary preventive or corrective measure to ensure that the organization's mission and objective of profit oriented venture is accomplished effectively and efficiently.

To ensure that loss and misuse of air ticket stock do not occur, frequent check of ticket stocks should be made at routine and proper record of transaction are to be made.

Proper record of transactions can be made as already discussed in this project.

Automated Accounting Systems in Air Travel Agencies makes the business transaction more accurate, conducive and fast, more so, it is easy to understand. The training of Accounting Staff to use computed system will make-work faster.

5.3 CONCLUSION.

Accounting in travel agencies will be simple and straightforward if the operators or owners of air travel agencies in the country can make use of computer in their record keeping.

During the course of this project work a software package has been developed to help in monitoring and keeping proper record of transaction on monthly basis. The automated system if carefully monitored will help in

keeping accurate records without keeping bulky registers and producing report become faster.

REFERENCE

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ACCOUNTING IN AIR TRAVEL AGENCIES
DETAILS OF CREDIT SALES IN JANUARY, 2001.

01

DATE	PARTICULARS	INVOICE	TICKET NUMBER	AMOUNT	AIR LINE
01/01	MUSA ISA	0200	P92347	56,800.00	BA
01/01	TOBI ISA	0201	P92348	66,800.00	SV
01/01	ISA NAYAYA	0202	P92349	56,800.00	BA
01/01	MUSA ISA	0203	P92350	66,800.00	SV
01/01	TOBI YISA	0204	P92351	76,800.00	WT

ACCOUNTING IN AIR TRAVEL AGENCIES
DETAILS OF CASH SALES IN JANUARY, 2001.

18/2001

DATE	PARTICULARS	INVOICE	TICKET NUMBER	AMOUNT	AIR LINE
01/2001	ABDULLAHI MOHAMMED	209	Q92124	39,448.00	SV
01/2001	GAMBO POTISKUM	0562	Q92125	9,426.00	KLM
01/2001	ALH. KACHALLA MOH'D	0563	Q92126	1,571.00	SV
01/2001	DIRECT COMM. FROM E /	205	Q92127	9,426.00	KLM
01/2001	SULHIMAN MOHAMMED	205	Q92127	24,667.00	KLM

ACCOUNTING IN AIR TRAVEL AGENCIES
DETAILS OF OTHER RECEIPTS IN JANUARY, 2001.

301

TE	PARTICULARS	RECEIPTS	AMOUNT
01/01	S.S WILLIAM FOR SHARES	552	100,000.00
01/01	IBRAHIM A. FOR SHARES	553	100,000.00
01/01	YANUSA SALIHU FOR SHARES	554	100,000.00
01/01	YEMCO BUREAU D/CHANGE	555	25,000.00
01/01	YEMCO BUREAU D/CHANGE	0	25,000.00

**ACCOUNTING IN AIR TRAVEL AGENCIES
LODGEMENTS INTO BANK ACCOUNT IN JANUARY, 2001.**

01

DATE	PARTICULARS	BANK	AMOUNT
1/01	CHEQUES FROM DIRECTOR	STB	350,000.00
1/01	CASH LODGEMENT	STB	6,312.00
1/01	CHEQUES FROM DIRECTOR	STB	100,000.00
1/01	CHEQUES FROM DIRECTOR	STB	200,000.00
1/01	CHEQUES FROM DIRECTOR	STB	350,000.00
			0.00

**ACCOUNTING IN AIR TRAVEL AGENCIES
PAYMENT VIA BANK ACCOUNT IN JANUARY, 2001.**

18/01

DATE	PARTICULARS	PAYMENT VOUCHER NUMBER	CHEQUE NUMBER	AMOUNT
1/01/01	COST OF 505 PEUGEOT	001	545401	130000.00
1/01/01	COST OF FILE CABINETS	002	545402	10000.00
1/01/01	COST OF A/C FOR OFFICE	003	545403	68000.00
1/01/01	COST OF OFFICE SAFE	004	545404	16640.00
1/01/01	COST OF TYPEWRITER	005	545405	5500.00

**ACCOUNTING IN AIR TRAVEL AGENCIES
PAYMENTS VIA CASH BOOK IN JANUARY, 2001.**

05/08/2001

DATE	PARTICULARS	PAYMENT VOUCHER NUMBER	AMOUNT
03/01/2001	PAYMENT TO SAUDIA AIR	9101	175,138.00
04/01/2001	LODGEMENT TO BANK	9102	356,312.00
05/01/2001	REFUND TO EZE CHRISTIAN	9103	26,180.00
06/01/2001	PAYMENT TO BRITSH AIR	9104	52,861.00
08/01/2001	LODGEMENT TO BANK	9105	729,330.00

ACCOUNTING IN AIR TRAVEL AGENCIES
CREDIT SALES DAY BOOK FOR THE MONTH OF JANUARY, 2001.

05/08/01

DATE	PARTICULARS	INVOICE	TICKET NUMBER	TOTAL	GOVERNMENT TAX	COMMISSION	W/ H TAX	AIR LINE	TRADE CREDITORS
03/01/01	MUSA ISA	0200	P92347	56,800.00	2,840.00	4,856.40	485.64	BA	51,457.96
04/01/01	TOBI ISA	0201	P92348	66,800.00	3,340.00	5,711.40	571.14	SV	60,517.46
05/01/01	ISA NAYAYA	0202	P92349	56,800.00	2,840.00	4,856.40	485.64	BA	51,457.96
06/01/01	MUSA ISA	0203	P92350	66,800.00	3,340.00	5,711.40	571.14	SV	60,517.46
07/01/01	TOBI YISA	0204	P92351	76,800.00	3,840.00	6,566.40	656.64	NT	69,576.96
TOTAL AMOUNT:				324,000.00	16,200.00	27,702.00	2,770.20		293,527.80

**ACCOUNTING IN AIR TRAVEL AGENCIES
MAIN CASH BOOK IN JANUARY, 2001.**

08/05/01

DATE	PARTICULARS	RECEIPT NUMBER	NEW TOTAL	CASH SALES	SHARE CAPITAL	DEBTORS CONTROL	COMMISSION RECALLED
03/01/01	ABDULLAHI MOHAMMED	209	38098.88	38089.88	0.00	0.00	0.00
04/01/01	GAMBO POTISKUM	0562	9103.63	0.00	0.00	9426.00	0.00
04/01/01	ALH. KACHALLA MOH'D	0563	1517.27	0.00	0.00	1571.00	0.00
05/01/01	DIRECT COMM. FROM E / AIR	205	9103.63	0.00	0.00	0.00	9426.00
05/01/01	SULEIMAN MOHAMMED	205	23823.39	23823.39	0.00	0.00	0.00
TOTAL AMOUNT:			81,646.80	61,913.27	0.00	10,997.00	9,426.00

ACCOUNTING IN AIR TRAVEL AGENCIES
BANK CASH BOOK IN JANUARY, 2001

	PARTICULARS	AMOUNT	CASH BOOK	DATE	PARTICULARS	AMOUNT
2001	MAIN CASH BOOK	356312.00	356312.00	04/01/2001	COST OF 505 PEUGEOT	130000.00
2001	MAIN CASH BOOK	3000000.00	3000000.00	04/01/2001	COST OF FILE	10000.00
2001	MAIN CASH BOOK	350000.00	350000.00	04/01/2001	COST OF A/C FOR	68000.00
2001	MAIN CASH BOOK	79330.00	79330.00	04/01/2001	COST OF OFFICE SAFE	16640.00
2001	MAIN CASH BOOK	64110.00	64110.00	05/01/2001	COST OF TYPEWRITER	5500.00
	TOTAL:	<u>64110.00</u>	<u>64110.00</u>			

*Menu Section

```
set device to screen
clear
SET SYSMENU OFF
CLOSE ALL
CLEAR
set date to brit
set safety off
set color to w/b
set exclusive on
set date to brit
set century on
set status off
set talk off
```

```
clear
set path to c:\account
set defa to c:\account
```

```
PUBLIC MY, mycar
store space(9) to mycar
PUBL mdate, mno, xyr,prval,date
mdate = {/}
```

```
_screen.icon = "seccast.ico"
_screen.caption = "Accounting in Air Travel Agency Science"
__screen.picture = "wizflax.bmp"
```

```
my =0
do form frmlogin
```

```
sele 1
do mainmenu mpr
read events
return
```

```
*-- Form: form1 (c:\account\confirmation.scx)
*-- ParentClass: form
*-- BaseClass: form
```

DEFINE CLASS form1 AS form

```
Height = 146
Width = 305
DoCreate = .T.
AutoCenter = .T.
Caption = "DATE VALIDATION FORM"
ControlBox = .F.
Icon = ""
Name = "Form1"
```

```
ADD OBJECT shape2 AS shape WITH ;
    Top = 20, ;
    Left = 25, ;
    Height = 72, ;
    Width = 256, ;
    Curvature = 45, ;
    BackColor = RGB(155,187,193), ;
    Name = "Shape2"
```

```
ADD OBJECT shape1 AS shape WITH ;
    Top = 99, ;
    Left = 48, ;
    Height = 37, ;
    Width = 195, ;
    BackColor = RGB(255,128,0), ;
    Name = "Shape1"
```

```
ADD OBJECT command1 AS commandbutton WITH ;
    Top = 105, ;
    Left = 55, ;
    Height = 25, ;
    Width = 120, ;
    FontBold = .T., ;
    Caption = "<Generate Report", ;
    ForeColor = RGB(128,0,64), ;
    Name = "Command1"
```

```
ADD OBJECT label2 AS label WITH ;
    AutoSize = .T., ;
```



```
FontBold = .T. ;
FontSize = 10 ;
WordWrap = .F. ;
BackStyle = 0 ;
Caption = "Transaction Month", ;
Height = 18 ;
Left = 36 ;
Top = 32 ;
Width = 117 ;
TabIndex = 1 ;
ForeColor = RGB(128,0,64), ;
Name = "Label2"
```

```
ADD OBJECT cbomonth AS combobox WITH ;
    ColumnCount = 0 ;
    ColumnWidths = "" ;
    RowSourceType = 1 ;
    RowSource =
"JANUARY,FEBRUARY,MARCH,APRIL,MAY,JUNE,JULY,AUGUST,SEPTEMBE
R,NOVEMBER,DECEMBER", ;
    ControlSource = "xmon", ;
    Enabled = .T., ;
    FirstElement = 1 ;
    Height = 24 ;
    Left = 159 ;
    NumberOfElements = 0 ;
    Top = 29 ;
    Width = 108 ;
    Name = "cbomonth"
```

```
ADD OBJECT label1 AS label WITH ;
    AutoSize = .F. ;
    FontBold = .F. ;
    FontSize = 10 ;
    WordWrap = .F. ;
    BackStyle = 0 ;
    Caption = "Transaction Year", ;
    Height = 18 ;
    Left = 36 ;
    Top = 63 ;
    Width = 107 ;
   TabIndex = 1 ;
    ForeColor = RGB(128,0,64), ;
    Name = "Label1"
```

```

ADD OBJECT cmdclose AS commandbutton WITH ;
    Top = 105, ;
    Left = 175, ;
    Height = 25, ;
    Width = 61, ;
    FontBold = .F., ;
    Caption = "Close", ;
    ForeColor = RGB(128,0,64), ;
    Name = "cmdclose"

```

```

ADD OBJECT txtyr AS textbox WITH ;
    Alignment = 3, ;
    Value = 0, ;
    ControlSource = "YR", ;
    Format = "", ;
    Height = 25, ;
    InputMask = "", ;
    Left = 157, ;
    Top = 58, ;
    Width = 109, ;
    Name = "txtyr"

```

```

PROCEDURE Init
    PUBL prval
    PUBL mdate, mno, xyr
    SET DATE TO brit
    mdate = {}
    THISFORM.cbomonth.ENABLED = .T.
    THISFORM.txtyr.ENABLED = .T.
ENDPROC

```

```

PROCEDURE command1.Click
    PUBL prval
    SET DATE TO brit
    DO CASE
        CASE prval = 1
            IF USED("teredit")
                SELE teredit
            ELSE
                SELE 0
                USE teredit

```

```

        ENDIF
        SET FILTER TO MONTH(mdate) = mno AND
YEAR(mdate) = xyf
        REPORT FORM rcredit PREVIEW
CASE prval = 2
    IF USED("tcash")
        SELE tcash
    ELSE
        SELE 0
        USE tcash
    ENDIF
        SET FILTER TO MONTH(mdate) = mno AND
YEAR(mdate) = xyf
        REPORT FORM rcash1 PREVIEW

CASE prval = 3
    IF USED("tcash")
        SELE tcash
    ELSE
        SELE 0
        USE tcash
    ENDIF
        *SET FILTER TO MONTH(mdate) = mno AND
YEAR(mdate) = xyf
        REPORT FORM rreceipt PREVIEW
CASE prval = 4
    IF USED("tbank")
        SELE tbank
    ELSE
        SELE 0
        USE tcash
    ENDIF
        *SET FILTER TO MONTH(mdate) = mno AND
YEAR(mdate) = xyf
        REPORT FORM rbank PREVIEW
CASE prval = 5
    IF USED("tacct")
        SELE tacct
    ELSE
        SELE 0
        USE tacct
    ENDIF
        SET FILTER TO MONTH(mdate) = mno AND
YEAR(mdate) = xyf
        REPORT FORM racct1 PREVIEW
CASE prval = 6

```

```

        IF USED("tbook")
        SET F tbook
ELSE
        SELE 0
        USE tbook
ENDIF
YEAR(mdate) = xyr
        SET FILTER TO MONTH(mdate) = mno AND
        REPORT FORM rbook PREVIEW

CASE prval = 7
        IF USED("teredit")
        SELE teredit
ELSE
        SELE 0
        USE teredit
ENDIF
YEAR(mdate) = xyr
        SET FILTER TO MONTH(mdate) = mno AND
        publ samt,sgt,scomm,swtax,strate
        store 0 to samt,sgt,scomm,swtax,strate
        sum amt to samt
        sum gt to sgt
        sum comm to scomm
        sum wtax to swtax
        sum trade to strate
        REPORT FORM rredsals PREVIEW
CASE prval = 8
        IF USED("tcash")
        SELE tcash
ELSE
        SELE 0
        USE tcash
ENDIF
YEAR(mdate) = xyr
        SET FILTER TO MONTH(mdate) = mno AND
        publ slamt,slgt,slcomm,Yhtax,slcommall,sltrade
        store 0 to slamt,slgt,slcomm,Yhtax,slcommall,sltrade
        sum amt to slamt
        sum gt to slgt
        sum comm to slcomm
        sum htax to Yhtax
        sum commall to slcommall
        sum trade to sltrade
        REPORT FORM reashsales PREVIEW
CASE prval = 9

```

```

IF USED("cash")
  SELE cash
ELSE
  SELE 0
  USE cash
ENDIF
*SET FILTER TO MONTH(mdate) = mno AND
YEAR(mdate) = xyr
publ ntot1,csales1,share1,debtors1,commrec1
store 0 to ntot1,csales1,share1,debtors1,commrec1
sum ntot1 to ntot1
sum csales1 to csales1
sum share1 to share1
sum debtors1 to debtors1
sum commrec1 to commrec1
REPORT FORM reashbook PREVIEW

CASE prval = 10
  USE tbank IN 1 AGAIN EXCL
  USE tacct IN 2 AGAIN EXCL
  PUBL amt2
  STORE 0 TO amt2
  SELE 1
  SUM amt FOR mdate = m,mdate TO amt2
  SELE 2
  *SET FILTER TO MONTH(mdate) = mno AND
YEAR(mdate) = xyr
publ s2amt,s2cashbk
store 0 to s2amt,s2cashbk
sum amt to s2amt
sum cashbk to s2cashbk
REPORT FORM rbankbook PREVIEW

CASE prval = 11
  IF USED("refund")
    SELE refund
  ELSE
    SELE 0
    USE refund
  ENDIF
  *SET FILTER TO MONTH(mdate) = mno AND
YEAR(mdate) = xyr
publ xtotamt,srecacomm,srectax,sse,sreccall,salines
store 0 to xtotamt,srecacomm,srectax,sse,sreccall,salines
sum srecacomm to srecacomm
sum srectax to srectax
sum xtotamt to xtotamt

```

```

sum se to ssc
sum recall to srecall
sum alines to salines
REPORT FORM rrefund PREVIEW
ENDCASE
THISFORM.RELEASE
ENDPROC

```

```

PROCEDURE cbomonth.Valid
do case
case this.value == "JANUARY"
mno = 1
case this.value == "FEBRUARY"
mno = 2
case this.value == "MARCH"
mno = 3
case this.value == "APRIL"
mno = 4
case this.value == "MAY"
mno = 5
case this.value == "JUNE"
mno = 6
case this.value == "JULY"
mno = 7
case this.value == "JANUARY"
mno = 1
case this.value == "AUGUST"
mno = 8
case this.value == "SEPTEMBER"
mno = 9
case this.value == "OCTOBER"
mno = 10
case this.value == "NOVEMBER"
mno = 11
case this.value == "DECEMBER"
mno = 12
ENDCASE
ENDPROC

```

```

PROCEDURE cmdclose.Click
thisform.release ()
ENDPROC

```

```

PROCEDURE cmdfirst.Click
    IF USED("tacct")
        SELE tacct
    ELSE
        SELE 0
        USE tacct
    ENDIF
    IF !BOF()
        GO TOP
        SCATTER MEMVAR MEMO
        THIS.ENABLED = .F.
    ELSE
        MESSAGEBOX("This is the First Record", "Warning")
    ENDIF
    THISFORM.REFRESH
    THISFORM.cmdlast.ENABLED = .T.
ENDPROC

```

```

PROCEDURE cmdclose.Click
    THISFORM.RELEASE
ENDPROC

```

```

PROCEDURE cmdprevious.Click
    IF USED("tacct")
        SELE tacct
    ELSE
        SELE 0
        USE tacct
    ENDIF
    IF NOT BOF()
        SKIP -1
        SCATTER MEMVAR MEMO
        THISFORM.REFRESH
        ThisForm.cmdlast.ENABLED = .T.
    ELSE
        ThisForm.cmdfirst.ENABLED = .F.
        MESSAGEBOX("This is the First Record".0 + 64, "Warning")
        THIS.ENABLED = .F.
    ENDIF
    THISFORM.cmdnext.ENABLED = .T.
ENDPROC

```

```

PROCEDURE cmdlast.Click

```

```

IF USED("taect")
    SELE taect
ELSE
    SELE 0
    USE taect
ENDIF
IF NOT EOF()
    GO BOTTOM
    SCATTER MEMVAR MEMO
    THISFORM.REFRESH
ELSE
    MESSAGEBOX("This is the Last Record", 0 + 64, "Warning")
ENDIF
THIS.ENABLED = .F.
THISFORM.cmdfirst.ENABLED = .T.
ENDPROC

```

```

PROCEDURE cmdnext.Click
    IF USED("taect")
        SELE taect
    ELSE
        SELE 0
        USE taect
    ENDIF

    IF NOT EOF()
        SKIP 1
        THISFORM.cmdfirst.ENABLED = .T.
        SCATTER MEMVAR MEMO
        THISFORM.REFRESH
    ELSE
        THISFORM.cmdlast.ENABLED = .F.
        MESSAGEBOX("This is the Last Record", 0 + 64, "Warning")
        THIS.ENABLED = .F.
    ENDIF
    THISFORM.cmdprevious.ENABLED = .T.
ENDPROC

```

```

PROCEDURE cmdaddnew.Click
    IF THIS.CAPTION = "Add New"

        THISFORM.SETALL("ReadOnly",.F., "Textbox")
        THISFORM.SETALL("ReadOnly",.F., "ComboBox")
        THISFORM.SETALL("ReadOnly",.F., "EDITbox")
    ENDIF

```



```

        IF USED("tacct")
            SELE tacct
        ELSE
            SELE 0
            USE tacct
        ENDIF

        SCATTER MEMVAR MEMO BLANK
        THISFORM.SETALL("enabled",.F.,"commandbutton")
        THIS.ENABLED = .T.
        THISFORM.cmdclose.ENABLED = .T.
        THISFORM.REFRESH
        THIS.CAPTION = "√ Save"
    ELSE
        THISFORM.SETALL("Readonly",.T.,"Textbox")
        THISFORM.SETALL("Readonly",.T.,"combobox")
        THISFORM.SETALL("Readonly",.T.,"editbox")
        THISFORM.SETALL("enabled",.T.,"commandbutton")

        IF USED("tacct")
            SELE tacct
        ELSE
            SELE 0
            USE tacct
        ENDIF

        INSERT INTO tacct FROM MEMVAR
        THISFORM.REFRESH
        THIS.CAPTION = "√ Add New"
    ENDIF
ENDPROC

```

```

PROCEDURE cmddelete.Click

```

```

        USE tacct EXCLUSIVE
        ans = MESSAGEBOX("This record will be deleted, Proceed?", 4
+ 32,"Warning")
        IF ans = 6
            DELETE
            PACK
            IF !EOF()
                SKIP
            ELSE
                SKIP -1
            ENDIF

```

REFRESH

```
        cmdmodify.Click
        FORM.SETALL("Readonly",.F.,"Textbox")
        FORM.SETALL("Readonly",.F.,"combobox")
        FORM.SETALL("Readonly",.F.,"EDITbox")

IF USED("tacct")
    SELE tacct
ELSE
    SELE 0
    USE tacct
ENDIF
IF THIS.CAPTION = "\<Modify"
    THIS.CAPTION = "\<Save"
    THISFORM.SETALL("Readonly",.F.,"Textbox")
    THISFORM.SETALL("enabled",.F.,"commandbutton")
    THIS.ENABLED = .T.
    THISFORM.cmdclose.ENABLED = .T.
ELSE
    GATHER MEMVAR MEMO
    THIS.CAPTION = "\<Modify"
    THISFORM.SETALL("Readonly",.T.,"combobox")
    THISFORM.SETALL("Readonly",.T.,"EDITbox")
    THISFORM.SETALL("Readonly",.T.,"Textbox")
    THISFORM.SETALL("enabled",.T.,"commandbutton")
    THISFORM.REFRESH
ENDIF
ENDPROC

PROCEDURE cmdlast.Click
    IF USED("tmaincash")
        SELE tmaincash
    ELSE
        SELE 0
        USE tmaincash
    ENDIF
    IF !EOF()
        GO BOTTOM
        SCATTER MEMVAR MEMO
        THISFORM.REFRESH
```

```

ELSE
    MESSAGEBOX("This is the Last Record", 0 + 64, "Warning")
ENDIF
THIS.ENABLED = .F.
THISFORM.cmdfirst.ENABLED = .T.
ENDPROC

```

```

PROCEDURE cmdnext.Click
    IF USED("tmaincash")
        SELE tmaincash
    ELSE
        SELE 0
        USE tmaincash
    ENDIF

    IF NOT EOF()
        SKIP 1
        THISFORM.cmdfirst.ENABLED = .T.
        SCATTER MEMVAR MEMO
        THISFORM.REFRESH
    ELSE
        THISFORM.cmdlast.ENABLED = .F.
        MESSAGEBOX("This is the Last Record", 0 + 64, "Warning")
        THIS.ENABLED = .F.
    ENDIF
    THISFORM.cmdprevious.ENABLED = .T.
ENDPROC

```

```

PROCEDURE cmdaddnew.Click
    IF THIS.CAPTION = "\<Add New"

        THISFORM.SETALL("ReadOnly",.F., "Textbox")
        THISFORM.SETALL("ReadOnly",.F., "ComboBox")
        THISFORM.SETALL("ReadOnly",.F., "EDITbox")

        IF USED("tmaincash")
            SELE tmaincash
        ELSE
            SELE 0
            USE tmaincash
        ENDIF

        SCATTER MEMVAR MEMO BLANK
        THISFORM.txtuser_name.SETFOCUS
    ENDIF

```

```

        THISFORM.SETALL("enabled",.F., "commandbutton")
        THIS.ENABLED = .T.
        THISFORM.cmdclose.ENABLED = .T.
        THISFORM.REFRESH
        THIS.CAPTION = "\<Save"
    ELSE
        THISFORM.SETALL("Readonly",.T., "Textbox")
        THISFORM.SETALL("Readonly",.T., "combobox")
        THISFORM.SETALL("Readonly",.T., "editbox")
        THISFORM.SETALL("enabled",.T., "commandbutton")

        IF USED("maincash")
            SELE tmaincash
        ELSE
            SELE 0
            USE tmaincash
        ENDIF

        GO TOP
        LOCATE FOR ALLTR(user_name) = ALLTR(m.user_name)
        AND ALLTR(user_password) = ALLTR(m.user_password)
        IF FOUND()
            MESSAGEBOX("This Record Already Exists!",
"Warning.")
            THISFORM.REFRESH
        ELSE
            INSERT INTO tmaincash FROM MEMVAR
            THISFORM.REFRESH
        ENDIF
        THIS.CAPTION = "\> Add New"
    ENDIF
ENDPROC

```

```

PROCEDURE cmddelete.Click
    IF USED("tmaincash")
        SELE tmaincash
    ELSE
        SELE 1
        USE tmaincash EXCLUSIVE
    ENDIF

    ans = MESSAGEBOX("This record will be deleted, Proceed?", 4 + 1
32, "Warning")
    IF ans = 6
        DELETE

```

```

        PACK
        IF !EOF()
            SKIP
        ELSE
            SKIP -1
        ENDIF
    ENDIF
    THISFORM.REFRESH
ENDPROC

PROCEDURE cmdmodify.Click
    THISFORM.SETALL("ReadOnly",.F.,"Textbox")
    THISFORM.SETALL("ReadOnly",.F.,"combobox")
    THISFORM.SETALL("ReadOnly",.F.,"EDITbox")

    IF USED("maincash")
        SELECT maincash
    ELSE
        SELECT 0
        USE maincash
    ENDIF
    IF THIS.CAPTION = "\<Modify"
        THIS.CAPTION = "\<Save"
        THISFORM.SETALL("ReadOnly",.F.,"Textbox")
        THISFORM.SETALL("enabled",.F.,"commandbutton")
        THIS.ENABLED = .T.
        THISFORM.cmdclose.ENABLED = .T.
    ELSE
        GATHER MEMVAR MEMO
        THIS.CAPTION = "\<Modify"
        THISFORM.SETALL("ReadOnly",.T.,"combobox")
        THISFORM.SETALL("ReadOnly",.T.,"EDITbox")
        THISFORM.SETALL("ReadOnly",.T.,"Textbox")
        THISFORM.SETALL("enabled",.T.,"commandbutton")
        THISFORM.REFRESH
    ENDIF
ENDPROC
ENDDEFINE

```