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PYTHON PROGRAMMING

**INDIVIDUAL ASSIGNMENT
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**TP066168
INTAKE: APD1F2109CS(CYB)
PYTHON BANK MANGMENT SYSTEM
MODULE: CT108-3-1-PYP-L-6 (DEGREE)**

APU UNIVERSITY | LECTURER: Mr. Usman Hashmi

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ASSUMPTION:

1. I assume that the system is just thought about for the purchasers in Malaysia. Also, the purchasers will withdraw cash from anyplace.
2. I assume that the workers can contact the purchasers in two - three days of labor to open for the purchasers a brand-new account
3. I assume the purchasers will simply register for gap associate degree account on-line. But if the purchasers facing any problems they'll come back to the bank and there the workers will register for them
4. I assume that foreigners will open themselves associate degree account with no problems
5. I assume that customers and workers cannot amendment their user id, but they can amendment the countersign
6. I assume that workers will scrutinize customers distils for any weird transactions
7. I assume that customers will look although their truncations to possess a glance
on what they're pocket money at
8. I assume that customers pay things on-line mistreatment the present account
9. I assume that customers WHO open bank account can withdraw cash once a year
10. I assume that workers account cannot deposit or withdraw cash and that they must open associate degree account within the bank to try and do That

2 INTRODUCTION

A Bank could be a institution that accepts deposits, pays interest on pre-defined rates, clears checks, makes loans, and occasionally acts as associate degree interceder in financial deals. It jointly provides different financial services to its guests.

Bank operation governs multitudinous considerations related to bank so as to maximize gains. The considerations astronomically speaking embody liquidity operation, quality operation, liability operation and capital operation. we're going to bandy these areas in after chapters.

The main idea of the design is to develop online Banking system for banks. In present system all banking work is done manually. Customers must visit bank to Withdraw or Deposit quantum. In present bank system it's also delicate to find account information of account holder. In this bank operation system, we will automate all the banking process. In my bank operation system stoner can check his balance online and he can change his word. In this Software you can keep record for diurnal Banking deals. The main purpose of developing bank operation system is to design an operation, which could store bank data and give an interface for reacquiring client related details.

In This Project I'm going to Make 31 Functions and I'm going to dived it into 31 subheading every subheading I'm going to be divided into 3 Parts 2 Parts for Pseudo code, The Flow chart and The Last one is for the source code and the Explanation.

At the End I'm going to Put A screen Shots of The Output or The UI screen

I've Used:

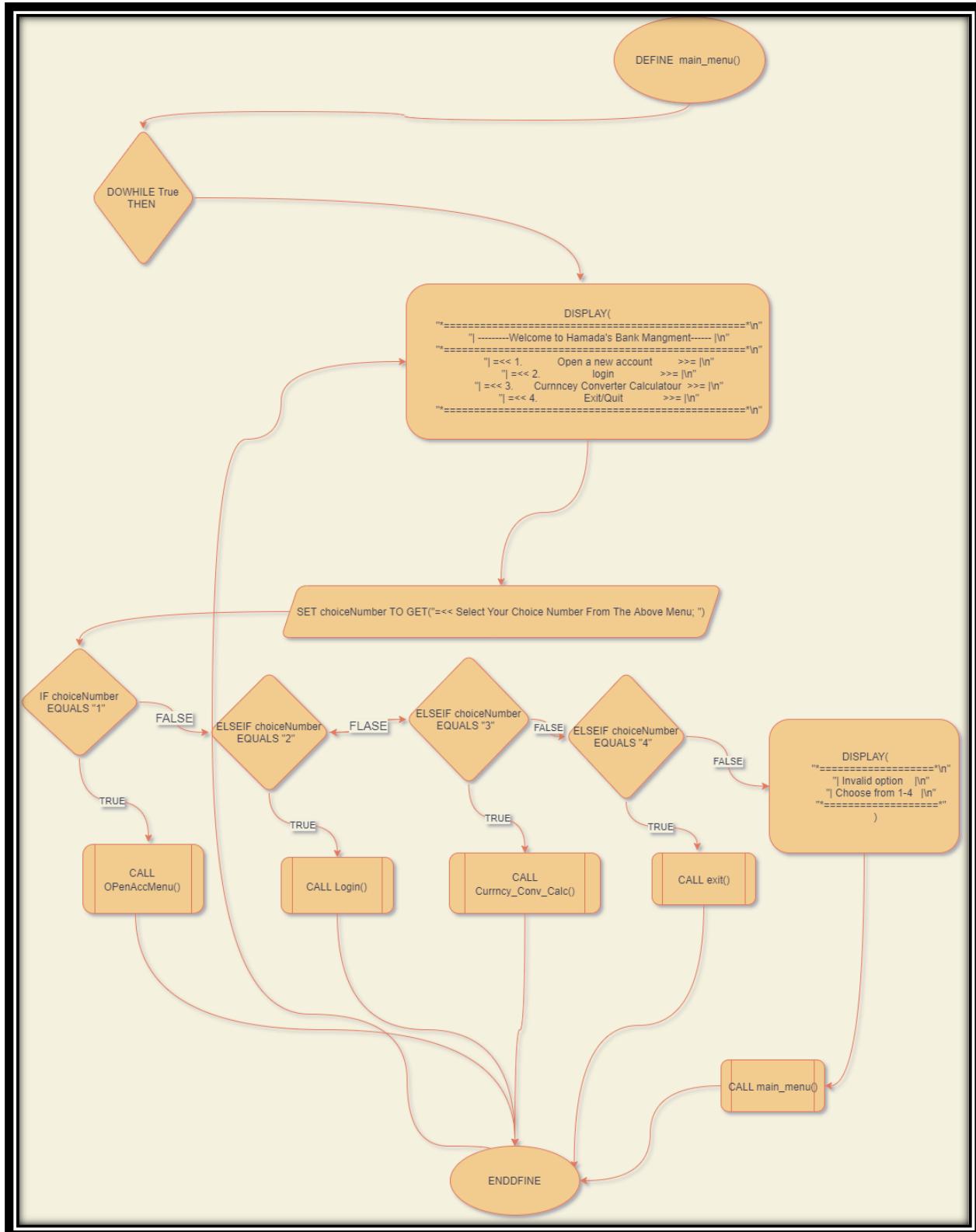
Visual Basic Code for The Coding.

Draw io For the Flowchart.

Notepad++ For the pseudo code.

3 MAIN MENU:

This The Flowchart of This Function:



This The Pseudo Code of This Function:

```
BEGIN

#The Main Logic Fuction
DEFINE main_menu() THEN
    DOWHILE True THEN
        DISPLAY(
            "*****\n"
            "| -----Welcome to Hamada's Bank Mangment----- |\n"
            "*****\n"
            "| << 1.          Open a new account      >>= |\n"
            "| << 2.          login                  >>= |\n"
            "| << 3.          Curnncey Converter Calculatour >>= |\n"
            "| << 4.          Exit/Quit              >>= |\n"
            "*****\n"
        )

        SET choiceNumber TO GET("=<< Select Your Choice Number From The Above Menu; ")

        IF choiceNumber == "1" THEN
            CALL OPenAccMenu() # Open Account Menu

        ELSEIF choiceNumber == "2" THEN
            CALL Login()

        ELSEIF choiceNumber == "3" THEN
            CALL Currncy_Conv_Calc() #Currncy Converter Calculator

        ELSEIF choiceNumber == "4" THEN
            CALL exit()

        ELSE THEN
            DISPLAY(
                "*****\n"
                "| Invalid option   |\n"
                "| Choose from 1-4  |\n"
                "*****"
            )
            CALL main_menu()
        ENDIF
    ENDDO
ENDDEFINE
```

And This is The Source of This Function:

```
#The Main Logic Fuction
def main_menu():
    while True:
        print(
            "*=====*\n"
            " | -----Welcome to Hamada's Bank Mangement----- | \n"
            "*=====*\n"
            " | << 1.           Open a new account      >>= |\n"
            " | << 2.           login                  >>= |\n"
            " | << 3.           Curnncey Converter Calculatour >>= |\n"
            " | << 4.           Exit/Quit              >>= |\n"
            "*=====*\n"
        )

        choiceNumber = input("=<< Select Your Choice Number From The Above Menu; ")

        if choiceNumber == "1":
            OPenAccMenu() # Open Account Menu #C

        elif choiceNumber == "2":
            Login() #C

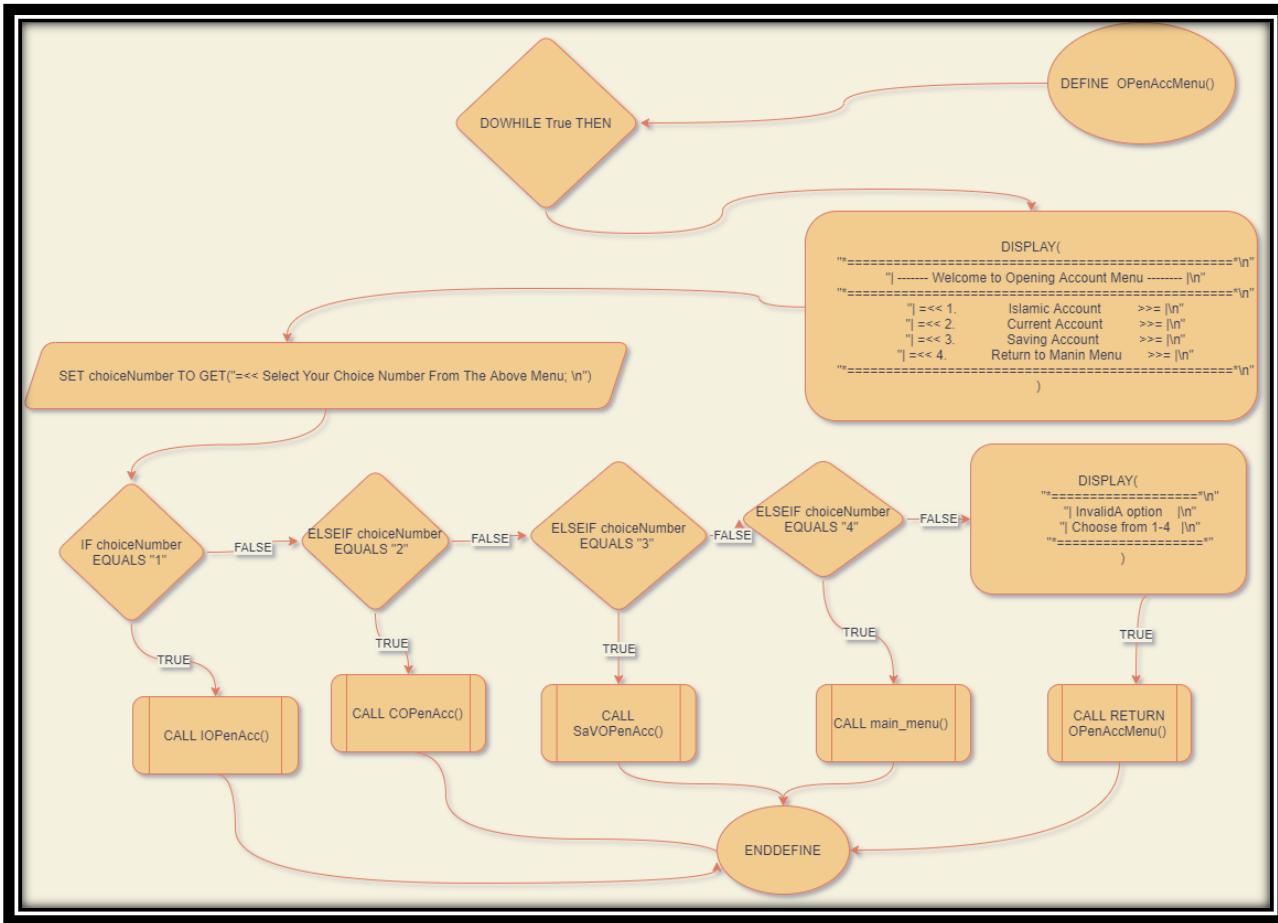
        elif choiceNumber == "3":
            Currnacy_Conv_Calc() #Currnacy Converter Calculator #C

        elif choiceNumber == "4":
            exit() #C

        else:
            print(
                "*=====*\n"
                " | Invalid option   | \n"
                " | Choose from 1-4  | \n"
                "*=====*"
            )
    main_menu()
```

4 OPEN ACCOUNT MENU:

This The Flowchart of This Function:



This The Pseudo Code of This Function:

```
#A Fuction That Displays The Open Account Menu
DEFINE OPenAccMenu() THEN
    DOWHILE True THEN
        DISPLAY(
            "*****\n"
            "| ----- Welcome to Opening Account Menu ----- |\n"
            "*****\n"
            "| << 1.           Islamic Account      >>= |\n"
            "| << 2.           Current Account      >>= |\n"
            "| << 3.           Saving Account       >>= |\n"
            "| << 4.           Return to Main Menu   >>= |\n"
            "*****\n"
        )

        SET choiceNumber TO GET("=<< Select Your Choice Number From The Above Menu; \n")

        IF choiceNumber == "1" THEN
            CALL IOPenAcc() # Islamic Open Account

        ELSEIF choiceNumber == "2" THEN
            CALL COPenAcc() # Current Open Account

        ELSEIF choiceNumber == "3" THEN
            CALL SaVOPenAcc() # Saving Open Account

        ELSEIF choiceNumber == "4" THEN
            CALL main_menu()

        ELSE THEN
            DISPLAY(
                "*****\n"
                "| Invalid option     |\n"
                "| Choose from 1-4   |\n"
                "*****\n"
            )
            CALL RETURN OPenAccMenu()

        ENDIF
    ENDDO
ENDDEFINE
```

And This is The Source of This Function:

```
#A Function That Displays The Open Account Menu
def OPenAccMenu():
    while True:
        print(
            "*=====*\n"
            " | ----- Welcome to Opening Account Menu ----- | \n"
            "*=====*\n"
            " | << 1.           Islamic Account      >>= |\n"
            " | << 2.           Current Account      >>= |\n"
            " | << 3.           Saving Account       >>= |\n"
            " | << 4.           Return to Main Menu   >>= |\n"
            "*=====*\n"
        )

        choiceNumber = input("=<< Select Your Choice Number From The Above Menu; \n")

        if choiceNumber == "1":
            IOPenAcc() # Islamic Open Account #C

        elif choiceNumber == "2":
            COPenAcc() # Current Open Account #C

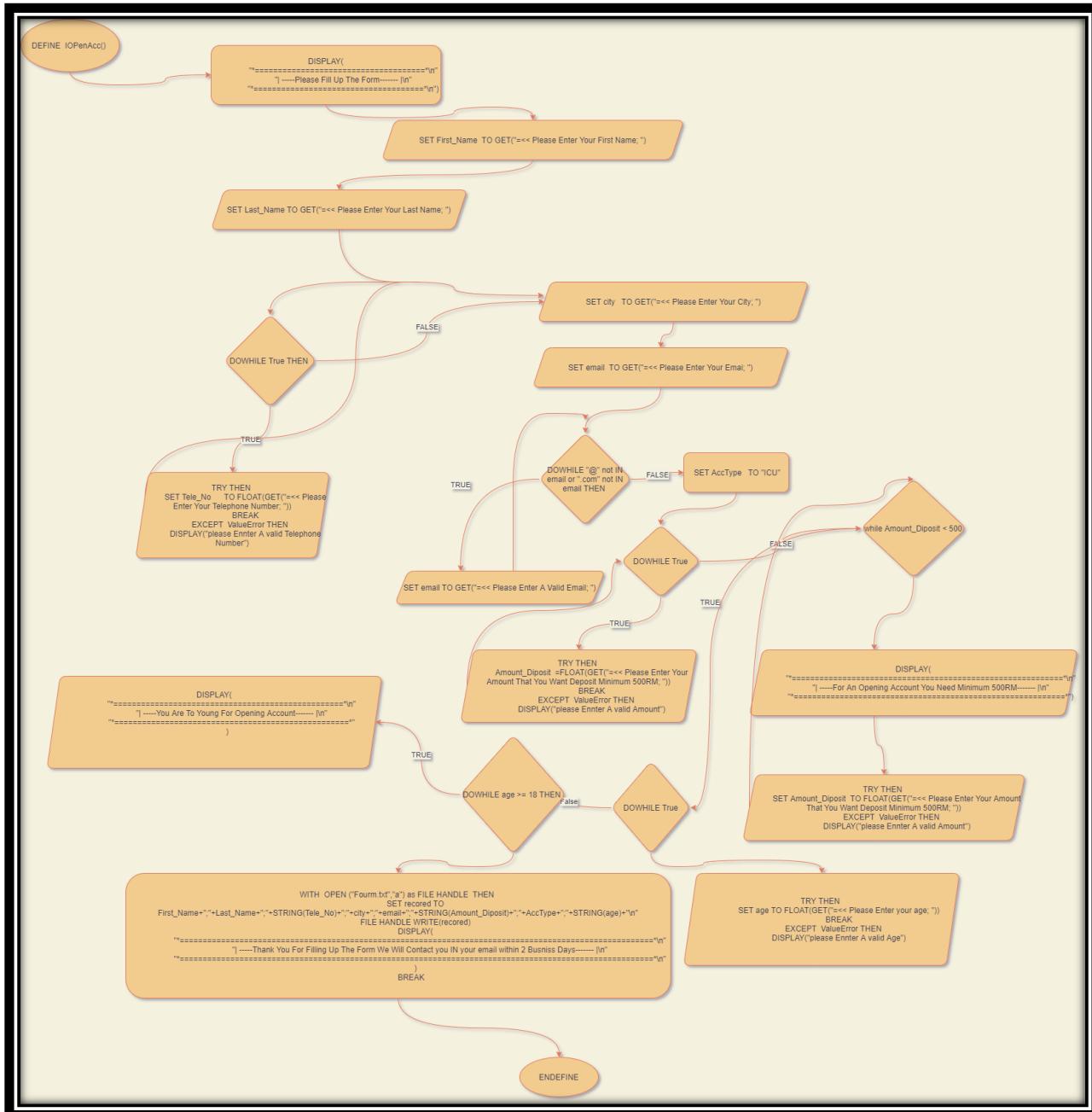
        elif choiceNumber == "3":
            SaVOPenAcc() #Saving Open Account #C

        elif choiceNumber == "4":
            main_menu() #C

        else:
            print(
                "*=====*\n"
                " | Invalid option     | \n"
                " | Choose from 1-4    | \n"
                "*=====*"
            )
            return OPenAccMenu()
```

5 ISLAMIC OPEN ACCOUNT:

This The Flowchart of This Function:



This The Pseudo Code of This Function:

```

#A Function That Open An Account For Islamic Customer
DEFINE IOPenAcc() THEN
  DISPLAY(
    "=====\\n"
    "| -----Please Fill Up The Form----- |\\n"
    "=====\\n"
  )

  SET First_Name      TO GET("=<< Please Enter Your First Name; ")
  SET Last_Name       TO GET("=<< Please Enter Your Last Name; ")
  DOWHILE True THEN
    TRY THEN
      SET Tele_No        TO FLOAT(GET("=<< Please Enter Your Telephone Number; "))
      BREAK
    EXCEPT ValueError THEN
      DISPLAY("please Ennter A valid Telephone Number")
    SET city            TO GET("=<< Please Enter Your City; ")
    SET email           TO GET("=<< Please Enter Your Email; ")
    DOWHILE "!" not IN email or ".com" not IN email THEN
      SET email TO GET("=<< Please Enter A Valid Email; ")
    SET AccType         TO "ICU"
    DOWHILE True THEN
      TRY THEN
        Amount_Ddeposit =FLOAT(GET("=<< Please Enter Your Amount That You Want Deposit Minimum 500RM; "))
        BREAK
      EXCEPT ValueError THEN
        DISPLAY("please Ennter A valid Amount")
      DOWHILE Amount_Ddeposit < 500 THEN
        DISPLAY(
          "=====\\n"
          "| -----For An Opening Account You Need Minimum 500RM----- |\\n"
          "=====\\n"
        )
      TRY THEN
        SET Amount_Ddeposit TO FLOAT(GET("=<< Please Enter Your Amount That You Want Deposit Minimum 500RM; "))
        EXCEPT ValueError THEN
          DISPLAY("please Ennter A valid Amount")
      ELSE THEN
        DOWHILE True THEN
          TRY THEN
            SET age TO FLOAT(GET("=<< Please Enter your age; "))
            BREAK
          EXCEPT ValueError THEN
            DISPLAY("please Ennter A valid Age")
        DOWHILE age >= 18 THEN
          WITH OPEN ("Form.txt","a") as FILE HANDLE THEN
            SET record TO First_Name+"."+Last_Name+";"+STRING(Tele_No)+";"+city+";"+email+";"+STRING(Amount_Ddeposit)+";"+AccType+";"+STRING(age)+"\n"
            FILE HANDLE WRITE(record)
            DISPLAY(
              "=====\\n"
              "| -----Thank You For Filling Up The Form We Will Contact you IN your email within 2 Busniss Days----- |\\n"
              "=====\\n"
            )
          BREAK
        ELSE THEN
          DISPLAY(
            "=====\\n"
            "| -----You Are To Young For Opening Account----- |\\n"
            "=====\\n"
          )
        ENDWITH
      ENDIF
    ENDDO
  ENDDIF
ENDDEFINE

```

And This is The Source of This Function:

```
#A Fuction That Open An Account For Islamic Customer
def IOOpenAcc():
    print(
        "*****\n"
        "| ----Please Fill Up The Form----- |\n"
        "*****\n"
    )

    First_Name      = input("=<< Please Enter Your First Name; ")
    Last_Name       = input("=<< Please Enter Your Last Name; ")

    while True:
        try:
            Tele_No     = float(input("=<< Please Enter Your Telephone Number; "))
            break
        except ValueError:
            print("please Ennter A valid Telephone Number")
    city           = input("=<< Please Enter Your City; ")
    email          = input("=<< Please Enter Your Email; ")
    while "@" not in email or ".com" not in email:
        email = input("=<< Please Enter A Valid Email; ")
    AccType        = "ICU"
    while True:
        try:
            Amount_Diposit  =float(input("=<< Please Enter Your Amount That You Want Deposit Minimum 500RM; "))
            break
        except ValueError:
            print("please Ennter A valid Amount")
    while Amount_Diposit < 500:
        print(
            "*****\n"
            "| ----For An Opening Account You Need Minimum 500RM----- |\n"
            "*****\n"
        )
        try:
            Amount_Diposit  = float(input("=<< Please Enter Your Amount That You Want Deposit Minimum 500RM; "))
        except ValueError:
            print("please Ennter A valid Amount")

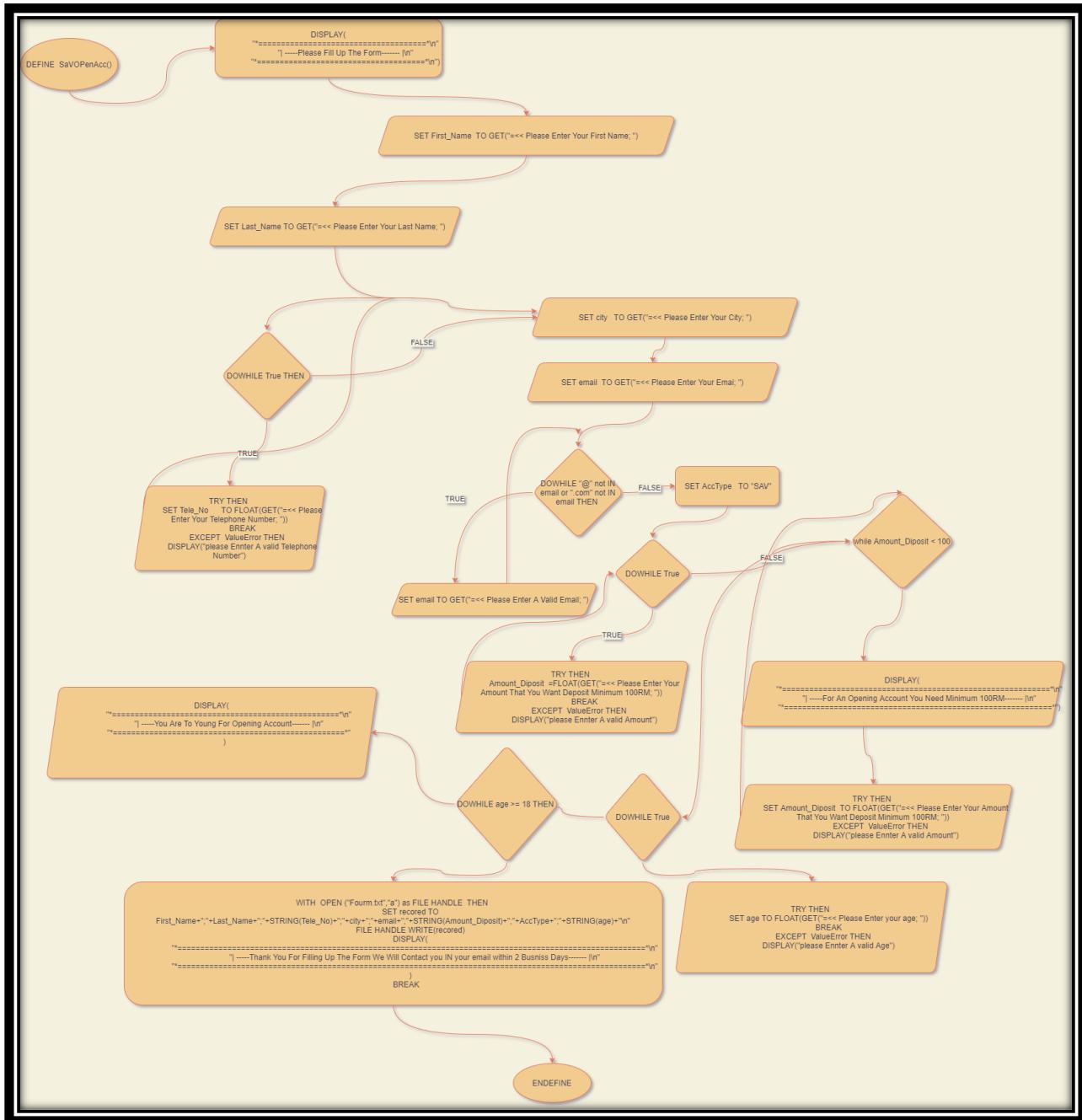
    else:
        while True:
            try:
                age = float(input("=<< Please Enter your age; "))
                break
            except ValueError:
                print("please Ennter A valid Age")
        while age >= 18:
            with open ("Fournm.txt","a") as fh:
                record = First_Name+";"+Last_Name+";"+str(Tele_No)+";"+city+";"+email+";"+str(Amount_Diposit)+";"+AccType+";"+str(age)+"\n"
                fh.write(record)
                print(
                    "*****\n"
                    "| ----Thank You For Filling Up The Form We Will Contact you in your email within 2 Busness Days----- |\n"
                    "*****\n"
                )
            break

        else:
            print(
                "*****\n"
                "| ----You Are To Young For Opening Account----- |\n"
                "*****\n"
            )


```

6 SAVING OPEN ACCOUNT:

This The Flowchart of This Function:



This The Pseudo Code of This Function:

```

#A Function That Open An Account For Saving Customer
DEFINE SAVOpenAcc() THEN
  DISPLAY(
    "=====^\\n"
    "| ----Please Fill Up The Form----- |\\n"
    "=====^\\n"
  )

  SET First_Name      TO GET("=<< Please Enter Your First Name; ")
  SET Last_Name       TO GET("=<< Please Enter Your Last Name; ")
  DOWHILE True THEN
    TRY THEN
      SET Tele_No      TO FLOAT(GET("=<< Please Enter Your Telephone Number; "))
      BREAK
    EXCEPT ValueError THEN
      DISPLAY("please Enter A valid Telephone Number")
    SET city           TO GET("=<< Please Enter Your City; ")
    SET email          TO GET("=<< Please Enter Your Email; ")
    DOWHILE "@" not IN email or ".com" not IN email THEN
      SET email TO GET("=<< Please Enter A Valid Email; ")
    SET AccType        TO "SAV"
    DOWHILE True THEN
      TRY THEN
        Amount_Disposit =FLOAT(GET("=<< Please Enter Your Amount That You Want Deposit Minimum 100RM; "))
        BREAK
      EXCEPT ValueError THEN
        DISPLAY("please Enter A valid Amount")
      DOWHILE Amount_Disposit < 100 THEN
        DISPLAY(
          "=====^\\n"
          "| ----For An Opening Account You Need Minimum 100RM----- |\\n"
          "=====^\\n"
        )
      TRY THEN
        SET Amount_Disposit TO FLOAT(GET("=<< Please Enter Your Amount That You Want Deposit Minimum 500RM; "))
        EXCEPT ValueError THEN
          DISPLAY("please Enter A valid Amount")
      ELSE THEN
        DOWHILE True THEN
          TRY THEN
            SET age TO FLOAT(GET("=<< Please Enter your age; "))
            BREAK
          EXCEPT ValueError THEN
            DISPLAY("please Enter A valid Age")
          DOWHILE age >= 18 THEN
            WITH OPEN ("Fourm.txt","a") as FILE HANDLE THEN
              SET recorded TO First_Name+"."+Last_Name+";"+STRING(Tele_No)+"."+city+";"+email+";"+STRING(Amount_Disposit)+";"+AccType+";"+STRING(age)+"\\n"
              FILE HANDLE WRITE(recorded)
            DISPLAY(
              "=====^\\n"
              "| ----Thank You For Filling Up The Form We Will Contact you IN your email within 2 Busness Days----- |\\n"
              "=====^\\n"
            )
          BREAK
        ELSE THEN
          DISPLAY(
            "=====^\\n"
            "| ----You Are To Young For Opening Account----- |\\n"
            "=====^\\n"
          )
        ENDIF
      ENDDO
    ENDWITH
  
```

And This is The Source of This Function:

```
#A Fuction That Open An Account For Saving Customer
def SaVOpenAcc():
    print(
        """=====
        | -----Please Fill Up The Form----- |\
        ====="""
    )

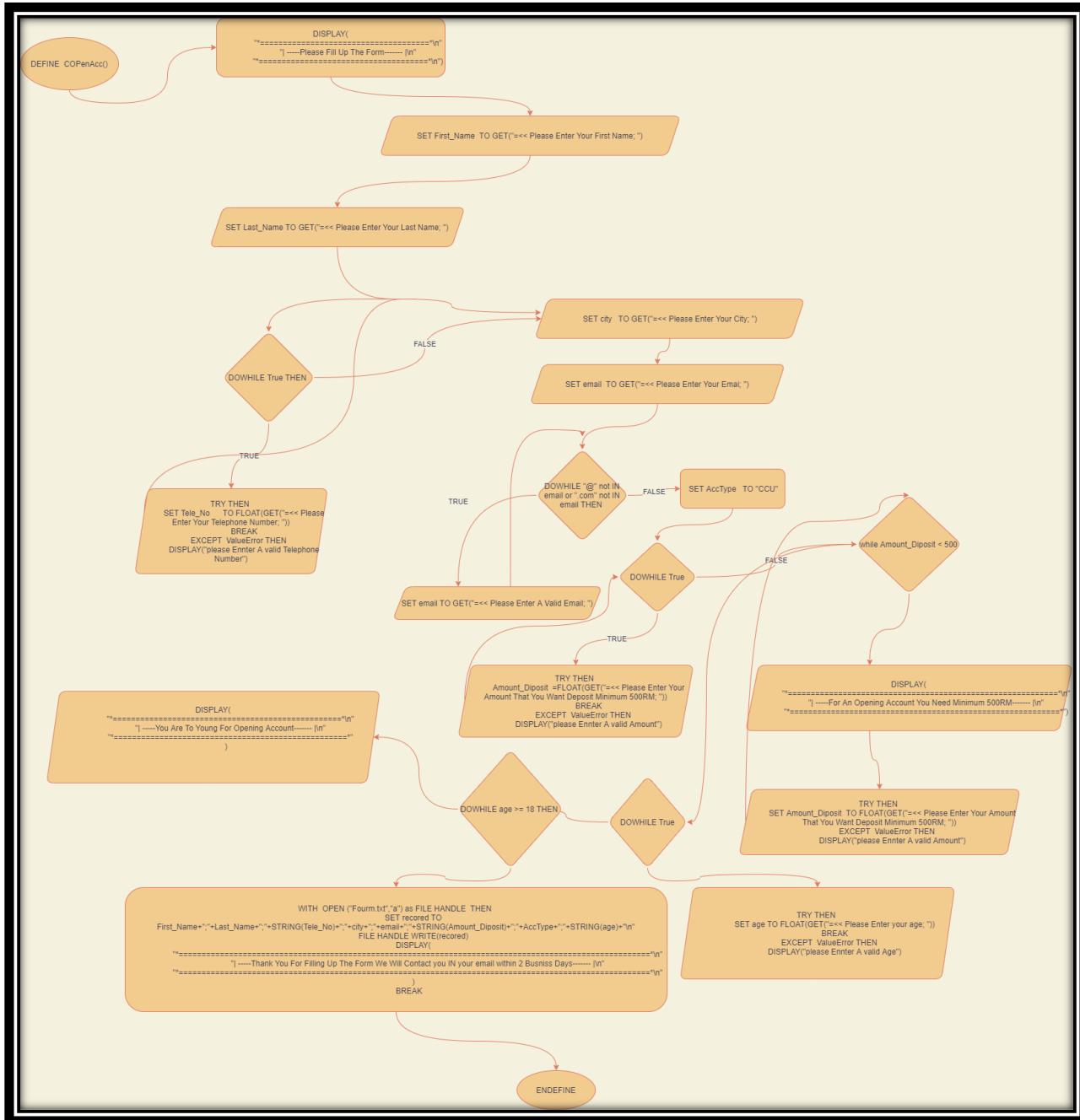
    First_Name      = input("=<> Please Enter Your First Name; ")
    Last_Name       = input("=<> Please Enter Your Last Name; ")

    while True:
        try:
            Tele_No      = float(input("=<> Please Enter Your Telephone Number; "))
            break
        except ValueError:
            print("please Ennter A valid Telephone Number")
    city           = input("=<> Please Enter Your City; ")
    email          = input("=<> Please Enter Your Email; ")
    while "@" not in email or ".com" not in email:
        email = input("=<> Please Enter A Valid Email; ")
    AccType        = "SAV"
    while True:
        try:
            Amount_Disposit  =float(input("=<> Please Enter Your Amount That You Want Deposit Minimum 100RM; "))
            break
        except ValueError:
            print("please Ennter A valid Amount")
    while Amount_Disposit < 100:
        print(
            """=====
            | -----For An Opening Account You Need Minimum 100RM----- |\
            ====="""
        )
        try:
            Amount_Disposit  = float(input("=<> Please Enter Your Amount That You Want Deposit Minimum 500RM; "))
        except ValueError:
            print("please Ennter A valid Amount")

    else:
        while True:
            try:
                age = float(input("=<> Please Enter your age; "))
                break
            except ValueError:
                print("please Ennter A valid Age")
        while age >= 18:
            with open ("Form.txt","a") as fh:
                record = First_Name+";"+Last_Name+";"+str(Tele_No)+";"+city+";"+email+";"+str(Amount_Disposit)+";"+AccType+";"+str(age)+"\n"
                fh.write(record)
                print(
                    """=====
                    | -----Thank You For Filling Up The Form We Will Contact you in your email within 2 Busniss Days----- |\
                    ====="""
                )
            break
        else:
            print(
                """=====
                | -----You Are To Young For Opening Account----- |\
                ====="""
            )
```

7 CURRENT OPEN ACCOUNT:

This The Flowchart of This Function:



This The Pseudo Code of This Function:

```

#A Function That Open An Account For Current Customer
DEFINE COPenAcc() THEN
  DISPLAY(
    "=====\\n"
    "| -----Please Fill Up The Form----- |\\n"
    "=====\\n"
  )

  SET First_Name      TO GET("=<< Please Enter Your First Name; ")
  SET Last_Name       TO GET("=<< Please Enter Your Last Name; ")
  DOWHILE True THEN
    TRY THEN
      SET Tele_No      TO FLOAT(GET("=<< Please Enter Your Telephone Number; "))
      BREAK
    EXCEPT ValueError THEN
      DISPLAY("please Enter A valid Telephone Number")
    SET city           TO GET("=<< Please Enter Your City; ")
    SET email          TO GET("=<< Please Enter Your Email; ")
    DOWHILE "@" NOT IN email OR ".com" not IN email THEN
      SET email TO GET("=<< Please Enter A Valid Email; ")
    SET AccType        TO "CCU"
    DOWHILE True THEN
      TRY THEN
        Amount_Deposit =FLOAT(GET("=<< Please Enter Your Amount That You Want Deposit Minimum 500RM; "))
        BREAK
      EXCEPT ValueError THEN
        DISPLAY("please Enter A valid Amount")
      DOWHILE Amount_Deposit < 500 THEN
        DISPLAY(
          "=====\\n"
          "| -----For An Opening Account You Need Minimum 500RM----- |\\n"
          "=====\\n"
        )
      TRY THEN
        SET Amount_Deposit TO FLOAT(GET("=<< Please Enter Your Amount That You Want Deposit Minimum 500RM; "))
        EXCEPT ValueError THEN
          DISPLAY("please Enter A valid Amount")
      ELSE THEN
        DOWHILE True THEN
          TRY THEN
            SET age TO FLOAT(GET("=<< Please Enter your age; "))
            BREAK
          EXCEPT ValueError THEN
            DISPLAY("please Enter A valid Age")
          DOWHILE age >= 18 THEN
            WITH OPEN ("Fourn.txt", "a") as FILE HANDLE THEN
              SET record TO First_Name+";"+Last_Name+"."+STRING(Tele_No)+";"+city+";"+email+";"+STRING(Amount_Deposit)+";"+AccType+";"+STRING(age)+"\n"
              FILE HANDLE WRITE(record)
              DISPLAY(
                "=====\\n"
                "| -----Thank You For Filling Up The Form We Will Contact you IN your email within 2 Business Days----- |\\n"
                "=====\\n"
              )
            BREAK
          ELSE THEN
            DISPLAY(
              "=====\\n"
              "| -----You Are To Young For Opening Account----- |\\n"
              "=====\\n"
            )
          ENDIF
        ENDWITH
      ENDO
    ENDDDEFINE
  
```

And This is The Source of This Function:

```
#A Fuction That Open An Account For Current Customer
def COPenAcc():
    print(
        """*=====\n| ----Please Fill Up The Form----- |\n|=====\n"""
    )

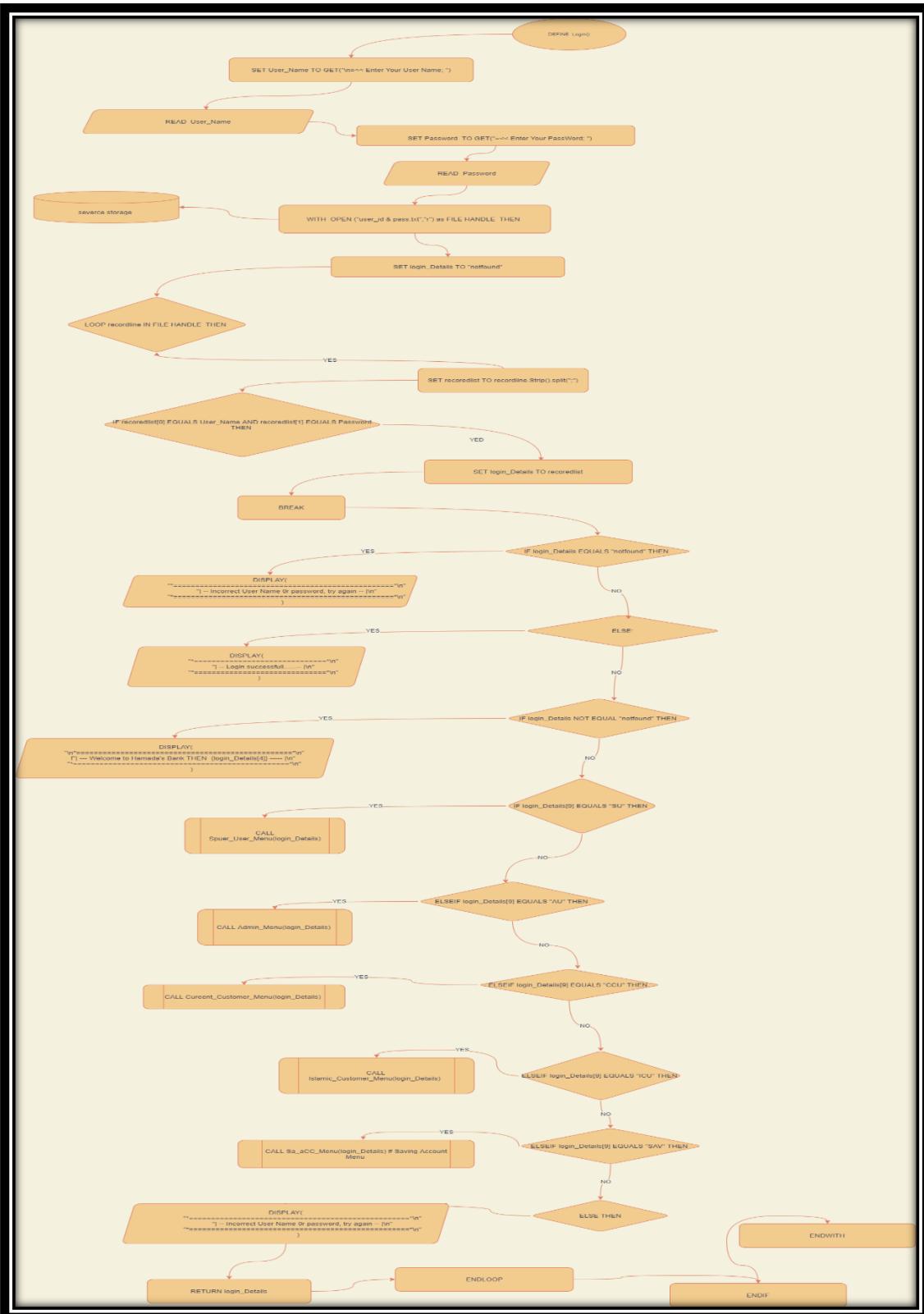
    First_Name      = input("=<< Please Enter Your First Name; ")
    Last_Name       = input("=<< Please Enter Your Last Name; ")
    while True:
        try:
            Tele_No      = float(input("=<< Please Enter Your Telephone Number; "))
            break
        except ValueError:
            print("please Ennter A valid Telephone Number")
    city           = input("=<< Please Enter Your City; ")
    email          = input("=<< Please Enter Your Email; ")
    while "@" not in email or ".com" not in email:
        email = input("=<< Please Enter A Valid Email; ")
    AccType        = "CCU"
    while True:
        try:
            Amount_Diposit  =float(input("=<< Please Enter Your Amount That You Want Deposit Minimum 500RM; "))
            break
        except ValueError:
            print("please Ennter A valid Amount")
    while Amount_Diposit < 500:
        print(
            """*=====\n| ----For An Opening Account You Need Minimum 500RM----- |\n|=====\n"""
        )
        try:
            Amount_Diposit  = float(input("=<< Please Enter Your Amount That You Want Deposit Minimum 500RM; "))
        except ValueError:
            print("please Ennter A valid Amount")

    else:
        while True:
            try:
                age = float(input("=<< Please Enter your age; "))
                break
            except ValueError:
                print("please Ennter A valid Age")
        while age >= 18:
            with open ("Fourm.txt", "a") as fh:
                record = First_Name+";"+Last_Name+";"+str(Tele_No)+";"+city+";"+email+";"+str(Amount_Diposit)+";"+AccType+";"+str(age)+"\n"
                fh.write(record)
            print(
                """*=====\n| ----Thank You For Filling Up The Form We Will Contact you in your email within 2 Busniss Days----- |\n|=====\n"""
            )
            break
        else:
            print(
                """*=====\n| ----You Are To Young For Opening Account----- |\n|=====\n"""
            )


```

8 LOGIN:

This The Flowchart of This Function:



This The Pseudo Code of This Function:

```
*  
#A Fuction That Makes The Login Process  
DEFINE Login() THEN  
    SET User_Name TO GET("\n=<> Enter Your User Name; ")  
    SET Password TO GET("=<> Enter Your PassWord; ")  
    WITH OPEN ("user_id & pass.txt","r") as FILE HANDLE THEN  
        SET login_Details TO "notfound"  
  
        LOOP recordline IN FILE HANDLE THEN  
            SET recoredlist TO recordline.strip().split(";")  
            IF recoredlist[0] == User_Name AND recoredlist[1] == Password THEN  
                SET login_Details TO recoredlist  
                BREAK  
  
            IF login_Details == "notfound" THEN  
                DISPLAY(  
                    "*****\n"|| -- Incorrect User Name Or password, try again -- |\n"||  
                    "*****\n")  
  
            ELSE THEN  
                DISPLAY(  
                    "*****\n"|| -- Login successfull.....-- |\n"||  
                    "*****\n")  
                IF login_Details != "notfound" THEN  
                    DISPLAY(  
                        "\n*****\n"|| --- Welcome to Hamada's Bank THEN {login_Details[4]} ----- |\n"||  
                        "*****\n")  
                )  
  
                IF login_Details[9] == "SU" THEN  
                    CALL Spuer_User_Menu(login_Details)  
  
                ELSEIF login_Details[9] == "AU" THEN  
                    CALL Admin_Menu(login_Details)  
  
                ELSEIF login_Details[9] == "CCU" THEN  
                    CALL Cureent_Customer_Menu(login_Details)  
  
                ELSEIF login_Details[9] == "ICU" THEN  
                    CALL Islamic_Customer_Menu(login_Details)  
  
                ELSEIF login_Details[9] == "SAV" THEN  
                    CALL Sa_aCC_Menu(login_Details) # Saving Account Menu  
  
                ELSE THEN  
                    DISPLAY(  
                        "*****\n"|| -- Incorrect User Name Or password, try again -- |\n"||  
                        "*****\n")  
                )  
                RETURN login_Details  
  
            ENDIF  
        ENDOLOOP  
    ENDWITH  
ENDDEFINE
```

And This is The Source of This Function:

```
#A Fuction That Makes The Login Process
def Login():
    User_Name = input("\n<< Enter Your User Name; ")
    Password = input("<< Enter Your Password; ")
    with open ("user_id & pass.txt","r") as fh:
        login_Details = "notfound"

        for recordline in fh:
            recoredlist = recordline.strip().split(";")
            if recoredlist[0] == User_Name and recoredlist[1] == Password:
                login_Details = recoredlist
                break

        if login_Details == "notfound":
            print(
                "*=====*\n"
                "| -- Incorrect User Name Or password, try again -- |\n"
                "*=====*\n"
            )

        else:
            print(
                "*=====*\n"
                "| -- Login successfull..... |\n"
                "*=====*\n"
            )
            if login_Details != "notfound":
                print(
                    "\n*=====*\n"
                    f"| --- Welcome to Hamada's Bank: {login_Details[4]} ----- |\n"
                    "*=====*\n"
                )

            if login_Details[9] == "SU":
                Spuer_User_Menu(login_Details)

            elif login_Details[9] == "AU":
                Admin_Menu(login_Details)

            elif login_Details[9] == "CCU":
                Cureent_Customer_Menu(login_Details)

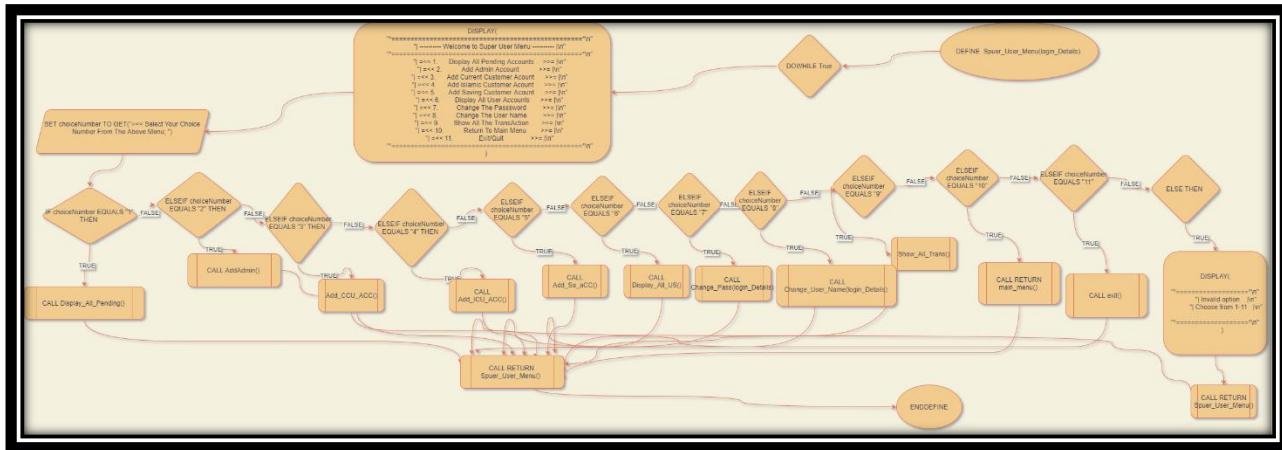
            elif login_Details[9] == "ICU":
                Islamic_Customer_Menu(login_Details)

            elif login_Details[9] == "SAV":
                Sa_aCC_Menu(login_Details) # Saving Account Menu #C

            else:
                print(
                    "*=====*\n"
                    "| -- Incorrect User Name Or password, try again -- |\n"
                    "*=====*\n"
                )
    return login_Details
```

9 SPUER USER MENU:

This The Flowchart of This Function:



This The Pseudo Code of This Function:

```

MOHAMED KHAIRY MOHAMED ADDELRAOUF BANK SYSTEM IF 000100 PSEUDO.DL
=====
#A Function That Displays The Super User Menu
DEFINE Spuer_User_Menu(login_Details) THEN
    DOWHILE True THEN
        DISPLAY(
            "*****\n"
            "| ----- Welcome to Super User Menu ----- |\n"
            "*****\n"
            "| << 1.      Display All Pending Accounts    >>= |\n"
            "| << 2.      Add Admin Account                >>= |\n"
            "| << 3.      Add Current Customer Account     >>= |\n"
            "| << 4.      Add Islamic Customer Account     >>= |\n"
            "| << 5.      Add Saving Customer Account      >>= |\n"
            "| << 6.      Display All User Accounts         >>= |\n"
            "| << 7.      Change The Password              >>= |\n"
            "| << 8.      Change The User Name             >>= |\n"
            "| << 9.      Show All The TransAction        >>= |\n"
            "| << 10.     Return To Main Menu              >>= |\n"
            "| << 11.     Exit/Quit                      >>= |\n"
            "*****\n"
        )

        SET choiceNumber TO GET("=<< Select Your Choice Number From The Above Menu; ")

        IF choiceNumber == "1" THEN
            CALL Display_All_Pending()
            CALL RETURN Spuer_User_Menu(login_Details)

        ELSEIF choiceNumber == "2" THEN
            CALL AddAdmin()
            CALL RETURN Spuer_User_Menu(login_Details)

        ELSEIF choiceNumber == "3" THEN
            Add_CCU_ACC() #Add Current Customer User
            RETURN Spuer_User_Menu(login_Details)

        ELSEIF choiceNumber == "4" THEN
            CALL Add_ICU_ACC() #Add Islamic Customer User
            CALL RETURN Spuer_User_Menu(login_Details)

        ELSEIF choiceNumber == "5" THEN
            CALL Add_Sa_ACC() #Add Saving Customer User
            CALL RETURN Spuer_User_Menu(login_Details)

        ELSEIF choiceNumber == "6" THEN
            CALL Display_All_US() #Display All The Users
            CALL RETURN Spuer_User_Menu(login_Details)

        ELSEIF choiceNumber == "7" THEN
            CALL Change_Pass(login_Details) # Change The Password

        ELSEIF choiceNumber == "8" THEN
            CALL Change_User_Name(login_Details)

        ELSEIF choiceNumber == "9" THEN
            Show_All_Trans() # Show All Users TransAction
            CALL RETURN Spuer_User_Menu(login_Details)

        ELSEIF choiceNumber == "10" THEN
            CALL RETURN main_menu()

        ELSEIF choiceNumber == "11" THEN
            CALL exit()
        ENDIF
    ENDWHILE
ENDDEF

```

And This is The Source of This Function:

```
#A Function That Displays The Super User Menu
def Spuer_User_Menu(login_Details):
    while True:
        print(
            """-----*\n|
| ----- Welcome to Super User Menu ----- |\n|
|-----*\n|
| -<< 1.     Display All Pending Accounts    >> |\\n"
| -<< 2.     Add Admin Account             >> |\\n"
| -<< 3.     Add Current Customer Account   >> |\\n"
| -<< 4.     Add Islamic Customer Account   >> |\\n"
| -<< 5.     Add Saving Customer Account    >> |\\n"
| -<< 6.     Display All User Accounts      >> |\\n"
| -<< 7.     Change The Password           >> |\\n"
| -<< 8.     Change The User Name          >> |\\n"
| -<< 9.     Show All The TransAction       >> |\\n"
| -<< 10.    Return To Main Menu           >> |\\n"
| -<< 11.    Exit/quit                   >> |\\n"
|-----*\n"""
        )

        choiceNumber = input("=<< Select Your Choice Number From The Above Menu; ")

        if choiceNumber == "1":
            Display_All_Pending()
            return Spuer_User_Menu(login_Details)

        elif choiceNumber == "2":
            AddAdmin()
            return Spuer_User_Menu(login_Details)

        elif choiceNumber == "3":
            Add_CCU_ACC() #Add Current Customer User
            return Spuer_User_Menu(login_Details)

        elif choiceNumber == "4":
            Add_ICU_ACC()#Add Islamic Customer User
            return Spuer_User_Menu(login_Details)

        elif choiceNumber == "5":
            Add_Sa_aCC() #Add Saving Customer User
            return Spuer_User_Menu(login_Details)

        elif choiceNumber == "6":
            Display_All_US() #Display All The Users
            return Spuer_User_Menu(login_Details)

        elif choiceNumber == "7":
            Change_Pass(login_Details)# Change The Password

        elif choiceNumber == "8":
            Change_User_Name(login_Details)

        elif choiceNumber == "9":
            Show_All_Trans() # Show All Users TransAction
            return Spuer_User_Menu(login_Details)

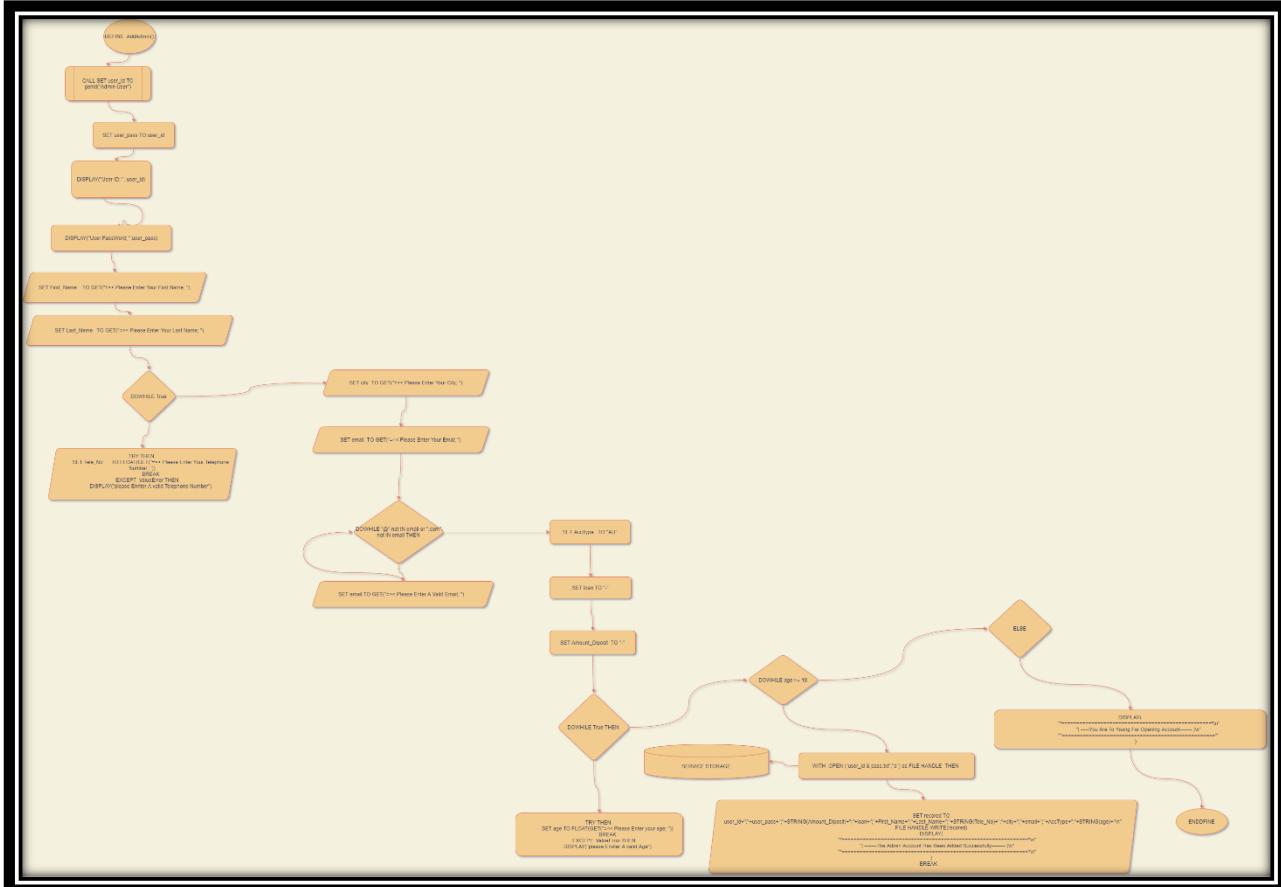
        elif choiceNumber == "10":
            return main_menu()

        elif choiceNumber == "11":
            exit()

        else:
            print(
                """-----*\n|
| Invalid option   |\\n"
| Choose from 1-11 |\\n"
|-----*\n"""
            )
            return Spuer_User_Menu()
```

10 ADD ADMIN:

This The Flowchart of This Function:



This The Pseudo Code of This Function:

```

#A Function That Add A New Admin Account
DEFINE AddAdmin() THEN
    CALL SET user_id TO genid("Admin User")
    SET user_pass TO user_id
    DISPLAY("User ID: ", user_id)
    DISPLAY("User Password: ", user_pass)
    SET First_Name      TO GET("=<< Please Enter Your First Name; ")
    SET Last_Name       TO GET("=<< Please Enter Your Last Name; ")
    DOWNHILE True THEN
        TRY THEN
            | SET Tele_No   TO FLOAT(GET("=<< Please Enter Your Telephone Number; "))
            | BREAK
            | EXCEPT ValueError THEN
            |     DISPLAY("Please Enter A valid Telephone Number")
            |     SET city      TO GET("=<< Please Enter Your City; ")
            |     SET email    TO GET("=<< Please Enter Your Email; ")
            |     DOWNHILE "@" not IN email or ".com" not IN email THEN
            |         SET email TO GET("=<< Please Enter A Valid Email; ")
            |     SET AccType   TO "AD"
            |     SET loan     TO ""
            |     SET Amount_Diposit TO ""
            |     DOWNHILE True THEN
            |         TRY THEN
            |             | SET age TO FLOAT(GET("=<< Please Enter your age; "))
            |             | BREAK
            |             | EXCEPT ValueError THEN
            |                 DISPLAY("Please Enter A valid Age")
            |             DOWNHILE age >= 18 THEN
            |                 WITH OPEN ("user_id & pass.txt", "a") AS FILE HANDLE THEN
            |                     SET record TO user_id+";"+user_pass+";"+STRING(Amount_Diposit)+"."+loan+";"+First_Name+";"+Last_Name+";"+STRING(Tele_No)+";"+city+";"+email+";"+AccType+";"+STRING(age)+"\n"
            |                     FILE HANDLE WRITE(record)
            |                     DISPLAY(
            |                         ======\n
            |                         -----The Admin Account Has Been Added Successfully----- |\n
            |                         ======\n
            |                     )
            |                 ENDIF
            |             ENDWITH
        ENDTRY
    ELSE THEN
        DISPLAY(
            ======\n
            | -----You Are To Young For Opening Account----- |\n
            ======\n
        )
    ENDIF
ENDDO
ENDWITH
ENDDEFINE

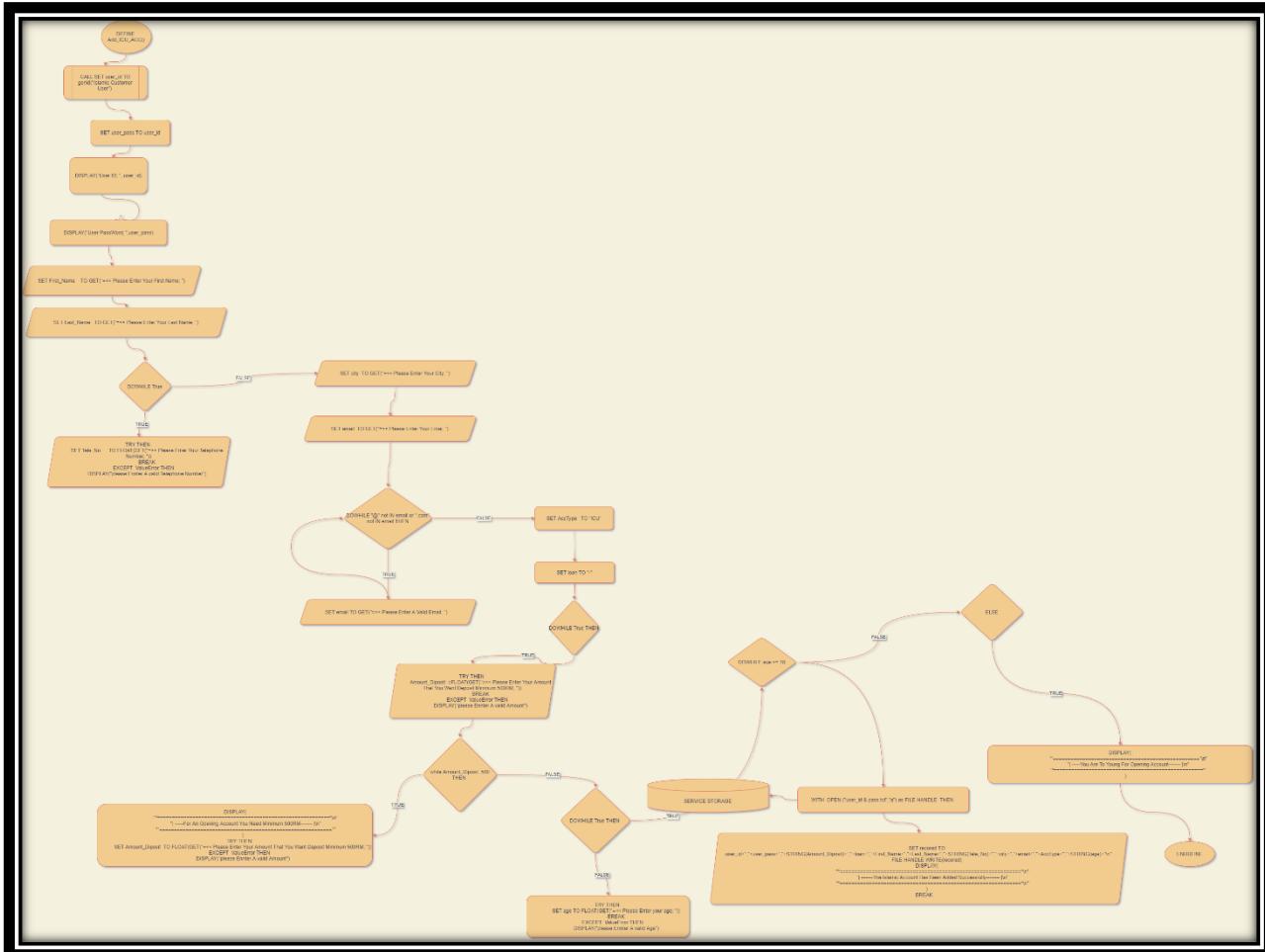
```

And This is The Source of This Function:

```
#A Function That Add A New Admin Account
def AddAdmin():
    user_id = genid("Admin User")
    user_pass = user_id
    print("User ID: ", user_id)
    print("User Password: ", user_pass)
    First_Name      = input("=<< Please Enter Your First Name; ")
    Last_Name       = input("=<< Please Enter Your Last Name; ")
    while True:
        try:
            Tele_No     = float(input("=<< Please Enter Your Telephone Number; "))
            break
        except ValueError:
            print("please Enter A valid Telephone Number")
    city          = input("=<< Please Enter Your City; ")
    email         = input("=<< Please Enter Your Email; ")
    while "@" not in email or ".com" not in email:
        email = input("=<< Please Enter A Valid Email; ")
    AccType      = "AU"
    loan          = "."
    Amount_Disposit = "."
    while True:
        try:
            age = float(input("=<< Please Enter your age; "))
            break
        except ValueError:
            print("please Enter A valid Age")
    if age >= 18:
        with open ("user_id & pass.txt","a") as fh:
            record = user_id+";"+user_pass+";"+str(Amount_Disposit)+";"+loan+";"+First_Name+";"+Last_Name+";"+str(Tele_No)+";"+city+";"+email+";"+AccType+";"+str(age)+"\n"
            fh.write(record)
            print(
                "*-----*\n"
                "| -----The Admin Account Has Been Added Successfully----- |\n"
                "*-----*\n"
            )
            break
    else:
        print(
            "*-----*\n"
            "| -----You Are To Young For Opening Account----- |\n"
            "*-----*\n"
        )
```

11 ADD ISLAMIC CUSTOMER ACCOUNT:

This The Flowchart of This Function:



This The Pseudo Code of This Function:

```

#A Function That Add A New Islamic Account
DEFINE Add_ICU_ACC() THEN
    CALL SET user_id TO genid("Islamic Customer User")
    SET user_pass TO user_id
    DISPLAY("User ID: ", user_id)
    DISPLAY("User PassWord: ", user_pass)
    SET First_Name      TO GET("=< Please Enter Your First Name; ")
    SET Last_Name       TO GET("=< Please Enter Your Last Name; ")
    DOWHILE True THEN
        TRY THEN
            SET Tele_No      TO FLOAT(GET("=< Please Enter Your Telephone Number; "))
            BREAK
        EXCEPT ValueError THEN
            DISPLAY("please Enter A valid Telephone Number")
        SET city           TO GET("=< Please Enter Your City; ")
        SET email          TO GET("=< Please Enter Your Email; ")
        DOWHILE "@" not IN email or ".com" not IN email THEN
            SET email TO GET("=< Please Enter A Valid Email; ")
        SET AccType        TO "ICU"
        SET loan TO "-"
        DOWHILE True THEN
            TRY THEN
                Amount_Diposit =FLOAT(GET("=< Please Enter Your Amount That You Want Deposit Minimum 500RM; "))
                BREAK
            EXCEPT ValueError THEN
                DISPLAY("please Enter A valid Amount")
            DOWHILE Amount_Diposit < 500 THEN
                DISPLAY(
                    "+=====+\n"
                    "| -----For An Opening Account You Need Minimum 500RM----- |\n"
                    "+=====+\n"
                )
            TRY THEN
                SET Amount_Diposit TO FLOAT(GET("=< Please Enter Your Amount That You Want Deposit Minimum 500RM; "))
                EXCEPT ValueError THEN
                    DISPLAY("please Enter A valid Amount")
            ELSE THEN
                DOWHILE True THEN
                    TRY THEN
                        SET age TO FLOAT(GET("=< Please Enter your age; "))
                        BREAK
                    EXCEPT ValueError THEN
                        DISPLAY("please Enter A valid Age")
                    DOWHILE age >= 18 THEN
                        WITH OPEN ("user_id & pass.txt","a") as FILE HANDLE THEN
                            SET record TO user_id+";"+user_pass+"."+STR(Amount_Diposit)+"."+loan+"."+First_Name+"."+Last_Name+"."+STR(Tele_No)+"."+city+"."+email+"."+AccType+"."+STR(age)+"\n"
                            FILE HANDLE WRITE(record)
                            DISPLAY(
                                "+=====+\n"
                                "| -----The Islamic Account Has Been Added Successfully----- |\n"
                                "+=====+\n"
                            )
                        ) BREAK
                    ELSE THEN
                        DISPLAY(
                            "+=====+\n"
                            "| -----You Are To Young For Opening Account----- |\n"
                            "+=====+\n"
                        )
                    ENDIF
                ENDDO
            ENDWITH
        ENDODEFINE
    
```

And This is The Source of This Function:

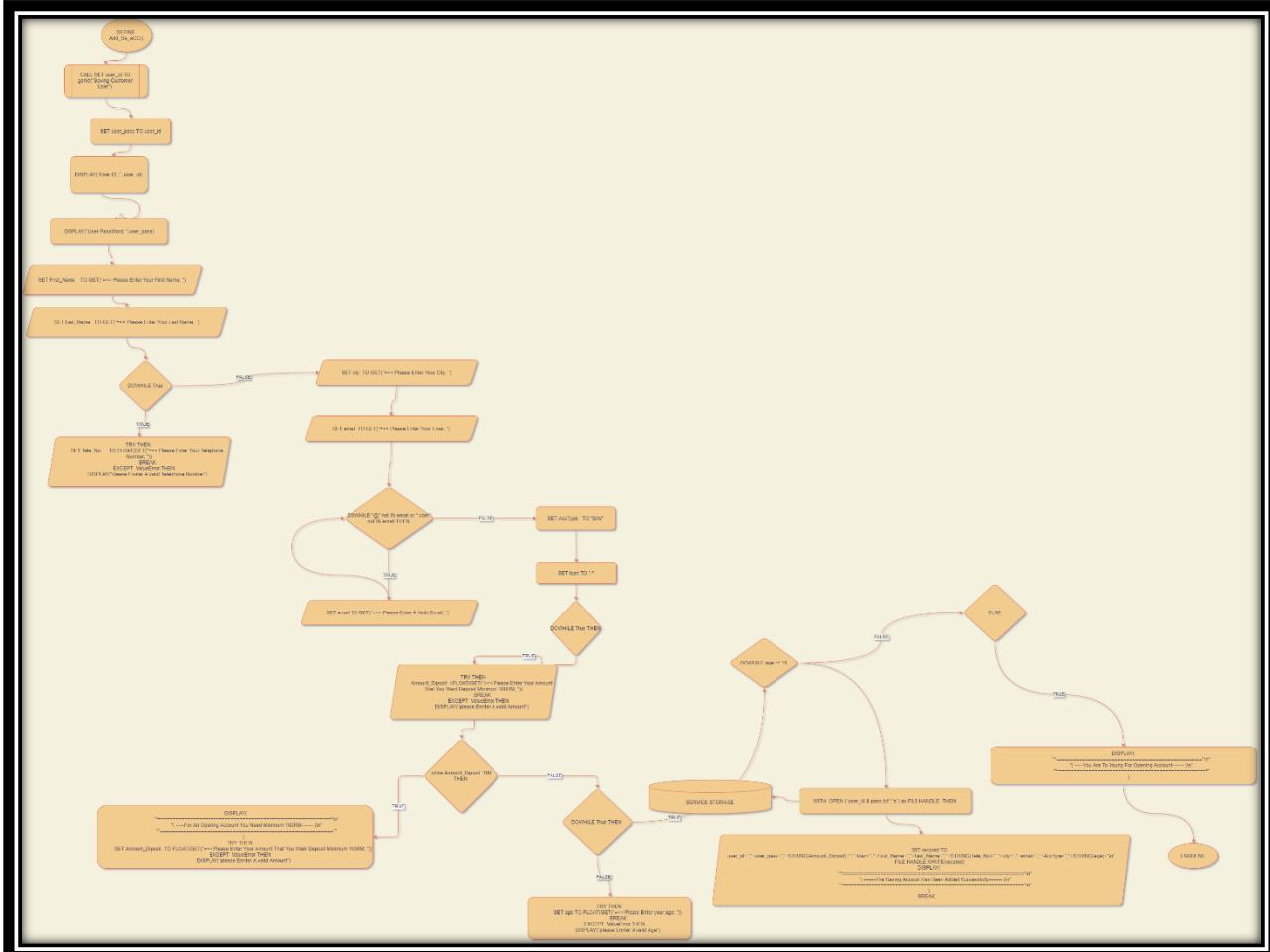
```
#A Function That Add A New Islamic Account
def Add_ICU_ACC():
    user_id = genid("Islamic Customer User") #C
    user_pass = user_id
    print("User ID: ", user_id)
    print("User Password: ", user_pass)
    First_Name      = input("=<> Please Enter Your First Name; ")
    Last_Name       = input("=<> Please Enter Your Last Name; ")
    while True:
        try:
            Tele_No     = float(input("=<> Please Enter Your Telephone Number; "))
            break
        except ValueError:
            print("please Enter A valid Telephone Number")
    city      = input("=<> Please Enter Your City; ")
    email    = input("=<> Please Enter Your Email; ")
    while "@" not in email or ".com" not in email:
        email = input("=<> Please Enter A Valid Email; ")
    AccType   = "ICU"
    loan      = "-"
    while True:
        try:
            Amount_Diposit = float(input("=<> Please Enter Your Amount That You Want Deposit Minimum 500RM; "))
            break
        except ValueError:
            print("please Enter A valid Amount")
    while Amount_Diposit < 500:
        print(
            "*=====*\n"
            "| -----For An Opening Account You Need Minimum 500RM----- |\n"
            "*=====*\n"
        )
        try:
            Amount_Diposit = float(input("=<> Please Enter Your Amount That You Want Deposit Minimum 500RM; "))
        except ValueError:
            print("please Enter A valid Amount")

    else:
        while True:
            try:
                age = float(input("=<> Please Enter your age; "))
                break
            except ValueError:
                print("please Enter A valid Age")
        while age >= 18:
            with open ("user_id & pass.txt","a") as fh:
                record = user_id+";"+user_pass+"."+str(Amount_Diposit)+"."+loan+"."+First_Name+"."+Last_Name+"."+str(Tele_No)+"."+city+"."+email+"."+AccType+"."+str(age)+"\n"
                fh.write(record)
                print(
                    "*=====*\n"
                    "| -----The Islamic Account Has Been Added Successfully----- |\n"
                    "*=====*\n"
                )
            break
        else:
            print(
                "*=====*\n"
                "| -----You Are To Young For Opening Account----- |\n"
                "*=====*\n"
            )


```

12 ADD SAVING ACCOUNT:

This The Flowchart of This Function:



This The Pseudo Code of This Function:

```

#A Function That Add A New Saving Account
DEFINE Add_Sa_cc() THEN
    CALL SET user_id TO genid("Saving Customer User")
    SET user_pass TO user_id
    DISPLAY("User ID: ", user_id)
    DISPLAY("User PassWord: ", user_pass)
    SET First_Name TO GET("=<< Please Enter Your First Name; ")
    SET Last_Name TO GET("=<< Please Enter Your Last Name; ")
    DOWNHILE True THEN
        TRY THEN
            SET Tele_No TO FLOAT(GET("=<< Please Enter Your Telephone Number; "))
            BREAK
        EXCEPT ValueError THEN
            DISPLAY("Please Enter A valid Telephone Number")
        SET city TO GET("=<< Please Enter Your City; ")
        SET email TO GET("=<< Please Enter Your Email; ")
        DOWNHILE "0" not IN email or ".com" not IN email THEN
            SET email TO GET("=<< Please Enter A Valid Email; ")
        SET AccType TO "SAV"
        SET loan TO "-"
        DOWNHILE True THEN
            TRY THEN
                Amount_Disposit =FLOAT(GET("=<< Please Enter Your Amount That You Want Deposit Minimum 100RM; "))
                BREAK
            EXCEPT ValueError THEN
                DISPLAY("Please Enter A valid Amount")
            DOWNHILE Amount_Disposit < 100 THEN
                DISPLAY(
                    "*****\n"
                    "-----For An Opening Account You Need Minimum 100RM-----\n"
                    "*****\n"
                )
            TRY THEN
                SET Amount_Disposit TO FLOAT(GET("=<< Please Enter Your Amount That You Want Deposit Minimum 100RM; "))
                EXCEPT ValueError THEN
                    DISPLAY("Please Enter A valid Amount")
            ELSE THEN
                DOWNHILE True THEN
                    TRY THEN
                        SET age TO FLOAT(GET("=<< Please Enter your age; "))
                        BREAK
                    EXCEPT ValueError THEN
                        DISPLAY("Please Enter A valid Age")
                    DOWNHILE age >= 18 THEN
                        WITH OPEN ("user_id & pass.txt","a") as FILE HANDLE THEN
                            SET record TO user_id+";"+user_pass+";"+STRING(Amount_Disposit)+"."+loan+"."+First_Name+"."+Last_Name+"."+STRING(Tele_No)+"."+city+"."+email+"."+AccType+"."+STRING(age)+"\n"
                            FILE HANDLE WRITE(record)
                        DISPLAY(
                            "*****\n"
                            "-----The Saving Account Has Been Added Successfully-----\n"
                            "*****\n"
                        )
                    ENDIF
                    ENDWITH
                ENDDO
            ENDDO
        ENDIF
    ENDWITH
ENDDEFINE

```

And This is The Source of This Function:

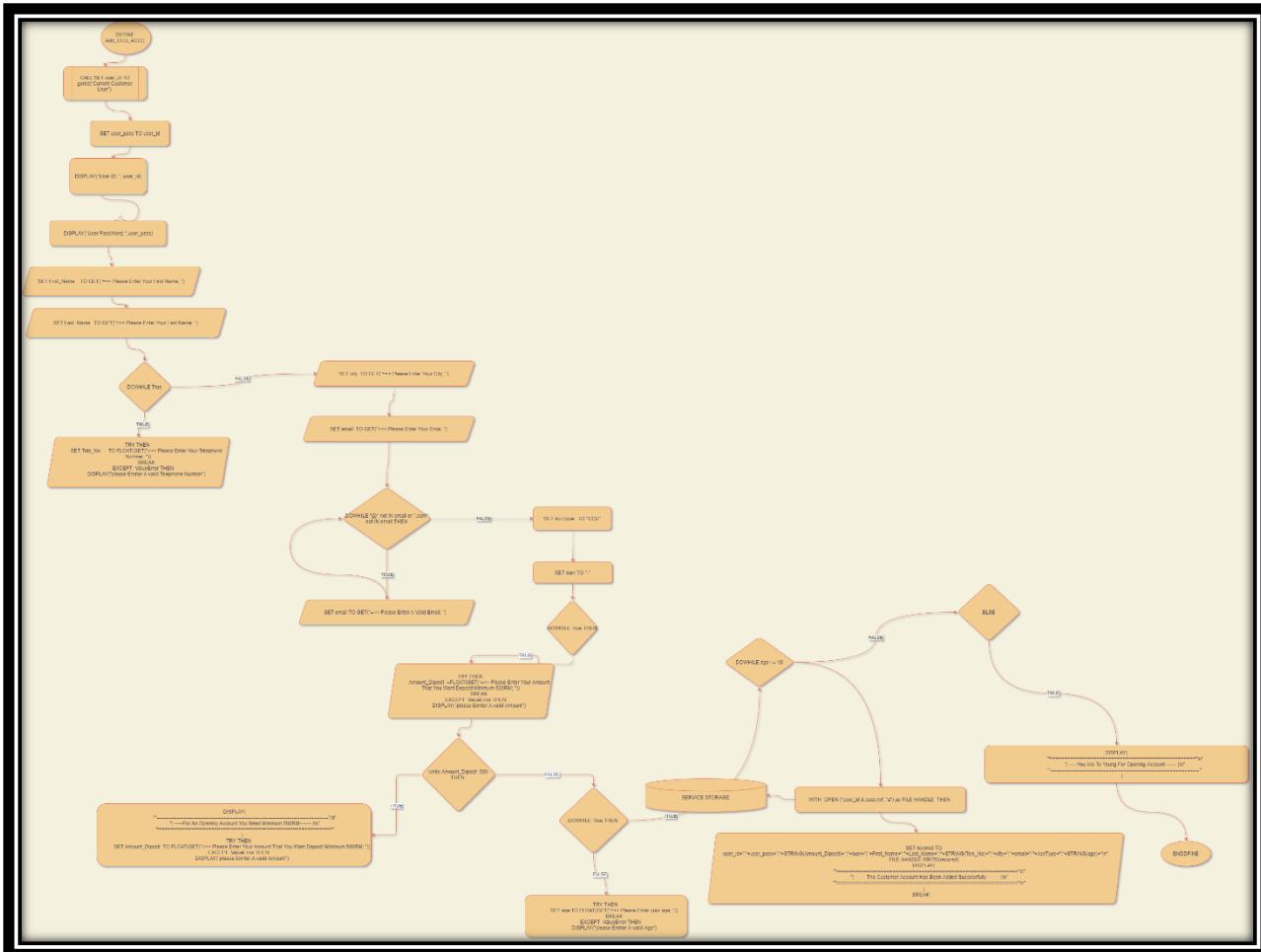
```
#A Function That Add A New Saving Account
def Add_Sa_aCC():
    user_id = genid("Saving Customer User")
    user_pass = user_id
    print("User ID: ", user_id)
    print("User Password: ", user_pass)
    First_Name      = input("=> Please Enter Your First Name: ")
    Last_Name       = input("=> Please Enter Your Last Name: ")
    while True:
        try:
            Tele_No     = float(input("=> Please Enter Your Telephone Number: "))
            break
        except ValueError:
            print("Please Enter A valid Telephone Number")
    city          = input("=> Please Enter Your City: ")
    email         = input("=> Please Enter Your Email: ")
    while "@" not in email or ".com" not in email:
        email = input("=> Please Enter A Valid Email: ")
    AccType      = "SAV"
    loan          = "."
    while True:
        try:
            Amount_Diposit = float(input("=> Please Enter Your Amount That You Want Deposit Minimum 100RM: "))
            break
        except ValueError:
            print("Please Enter A valid Amount")
    while Amount_Diposit < 100:
        print(
            "=====|\n" +
            "| -----For An Opening Account You Need Minimum 100RM----- |\n" +
            "=====|\n"
        )
        try:
            Amount_Diposit = float(input("=> Please Enter Your Amount That You Want Deposit Minimum 100RM: "))
        except ValueError:
            print("Please Enter A valid Amount")

    else:
        while True:
            try:
                age = float(input("=> Please Enter your age: "))
                break
            except ValueError:
                print("Please Enter A valid Age")
        while age >= 18:
            with open ("user_id & pass.txt","a") as fh:
                record = user_id+";"+user_pass+"_"+str(Amount_Diposit)+"_"+loan+"_"+First_Name+"_"+Last_Name+"_"+str(Tele_No)+"_"+city+"_"+email+"_"+AccType+"_"+str(age)+"\n"
                fh.write(record)
                print(
                    "=====|\n" +
                    "| -----The Saving Account Has Been Added Successfully----- |\n" +
                    "=====|\n"
                )
            break
        else:
            print(
                "=====|\n" +
                "| -----You Are Too Young For Opening Account----- |\n" +
                "=====|\n"
            )


```

13 ADD CURRENT CUSTOMER ACCOUNT:

This The Flowchart of This Function:



This The Pseudo Code of This Function:

```

#A Function That Add A New Current Account
DEFINE Add_CCU_Acc AS THEN
    CALL user_id TO user_id("Current Customer User")
    SET user_id TO user_id
    DISPLAY("User ID: ", user_id)
    DISPLAY("User PassWord: ", user_pass)
    SET First_Name TO GET("=<> Please Enter Your First Name; ")
    SET Last_Name TO GET("=<> Please Enter Your Last Name; ")
    DOWHILE True THEN
        TRY
            SET Tele_No TO FLOAT(GET("=<> Please Enter Your Telephone Number; "))
            BREAK
        EXCEPT ValueError THEN
            DISPLAY("Please Ennter A valid Telephone Number")
            SET city TO GET("=<> Please Enter Your City; ")
            SET email TO GET("=<> Please Enter Your Email; ")
            DOWHILE "!" not IN email or ".com" not IN email THEN
                SET email TO GET("=<> Please Enter A Valid Email; ")
            SET AccType TO "CCU"
            SET loan TO ""
            DOWHILE True THEN
                TRY THEN
                    Amount_Deposit =FLOAT(GET("=<> Please Enter Your Amount That You Want Deposit Minimum 500RM; "))
                    BREAK
                EXCEPT ValueError THEN
                    DISPLAY("please Enter A valid Amount")
                    DOWHILE Amount_Deposit < 500 THEN
                        DISPLAY(
                            "=====\n"
                            "| -----For An Opening Account You Need Minimum 500RM----- |\n"
                            "=====\n"
                        )
                TRY THEN
                    SET Amount_Deposit TO FLOAT(GET("=<> Please Enter Your Amount That You Want Deposit Minimum 500RM; "))
                    EXCEPT ValueError THEN
                        DISPLAY("please Ennter A valid Amount")
                ELSE THEN
                    DOWHILE True THEN
                        TRY THEN
                            SET age TO FLOAT(GET("=<> Please Enter your age; "))
                            BREAK
                        EXCEPT ValueError THEN
                            DISPLAY("please Enter A valid Age")
                        DOWHILE age >= 18 THEN
                            WITH OPEN ("user_id & pass.txt","a") as FILE HANDLE THEN
                                SET record TO user_id+";"+user_pass+"."+STRING(Amount_Deposit)+"."+loan+"."+First_Name+"."+Last_Name+"."+STRING(Tele_No)+"."+city+"."+email+"."+AccType+"."+STRING(age)+"\n"
                                FILE HANDLE WRITE(record)
                                DISPLAY(
                                    "=====\n"
                                    "| -----The Current Account Has Been Added Successfully----- |\n"
                                    "=====\n"
                                )
                            ENDTRY
                            BREAK
                        ELSE THEN
                            DISPLAY(
                                "=====\n"
                                "| -----You Are To Young For Opening Account----- |\n"
                                "=====\n"
                            )
                        ENDIF
                    ENDWITH
                ENDDO
            ENDDO
        ENDTRY
    ENDDO
ENDDEFINE

```

And This is The Source of This Function:

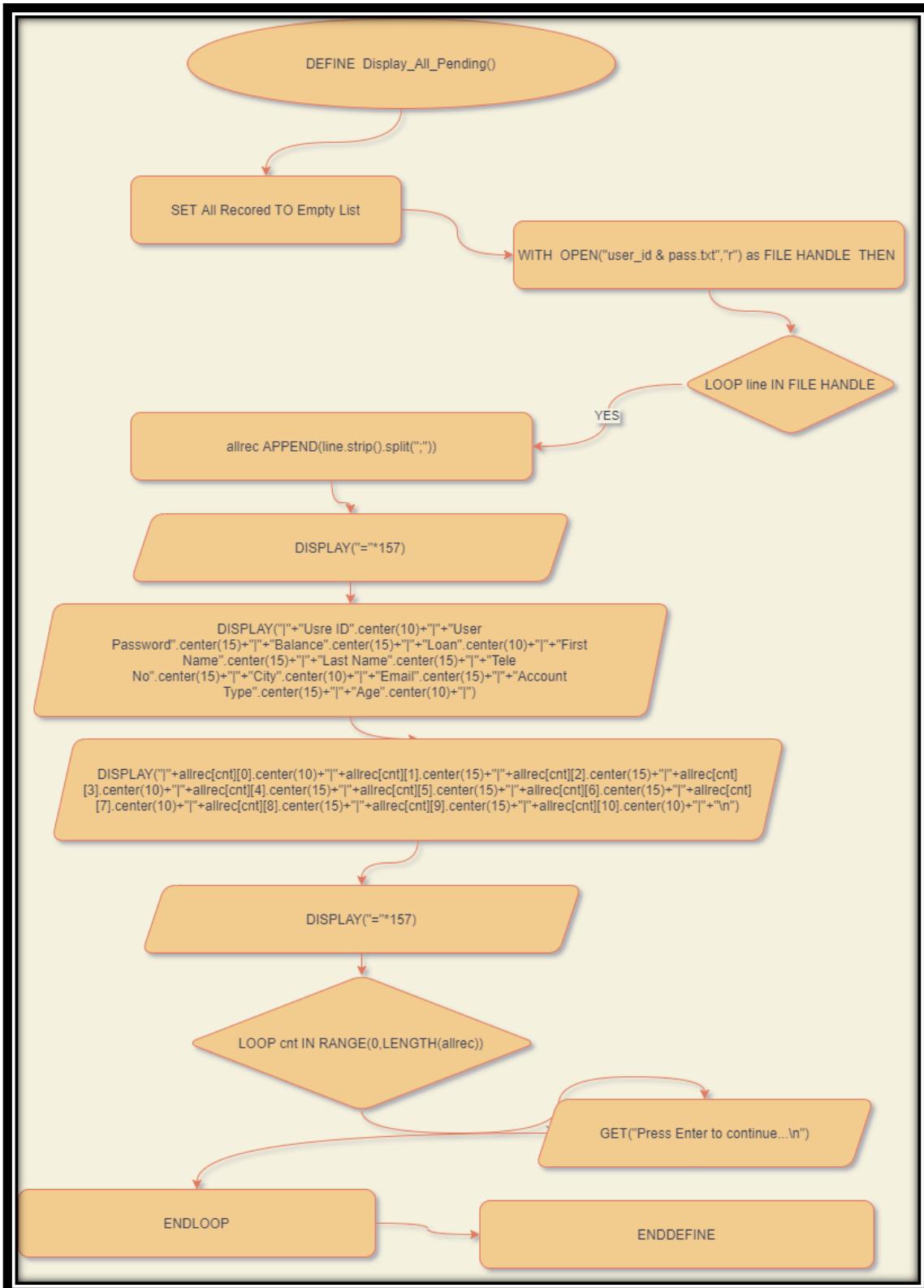
```
#A Function That Add A New Current Account
def Add_CCU_ACC():
    user_id = genid("Current Customer User") #C
    user_pass = user_id
    print("User ID: ", user_id)
    print("User Password: ", user_pass)
    First_Name      = input("=> Please Enter Your First Name; ")
    Last_Name       = input("=> Please Enter Your Last Name; ")
    while True:
        try:
            Tele_No     = float(input("=> Please Enter Your Telephone Number; "))
            break
        except ValueError:
            print("please Ennter A valid Telephone Number")
    city      = input("=> Please Enter Your City; ")
    email    = input("=> Please Enter Your Email; ")
    while "@" not in email or ".com" not in email:
        email = input("=> Please Enter A Valid Email; ")
    AccType   = "CCU"
    loan     = "."
    while True:
        try:
            Amount_Diposit = float(input("=> Please Enter Your Amount That You Want Deposit Minimum 500RM; "))
            break
        except ValueError:
            print("please Ennter A valid Amount")
    while Amount_Diposit < 500:
        print(
            "*-----*\n"
            "| ----For An Opening Account You Need Minimum 500RM----- |\n"
            "*-----*"
        )
        try:
            Amount_Diposit = float(input("=> Please Enter Your Amount That You Want Deposit Minimum 500RM; "))
        except ValueError:
            print("please Ennter A valid Amount")

    else:
        while True:
            try:
                age = float(input("=> Please Enter your age; "))
                break
            except ValueError:
                print("please Ennter A valid Age")
        while age >= 18:
            with open ("user_id & pass.txt","a") as fh:
                recored = user_id+";"+user_pass+";"+str(Amount_Diposit)+";"+loan+";"+First_Name+";"+Last_Name+";"+str(Tele_No)+";"+city+";"+email+";"+AccType+";"+str(age)+"\n"
                fh.write(recored)
                print(
                    "*-----*\n"
                    "| -----The Current Account Has Been Added Successfully----- |\n"
                    "*-----*"
                )
            break
        else:
            print(
                "*-----*\n"
                "| ----You Are To Young For Opening Account----- |\n"
                "*-----*"
            )

```

14 DISPLAY ALL USERS:

This The Flowchart of This Function:



This The Pseudo Code of This Function:

```

#4 Function That Displays All The Users
DISPLAY_ALL_USR()
{
    SET alived TO 1
    SET allrecd TO 0
    WHILE alived = 1 DO
        READ line < ${FILE_NAME}
        IF line = "" THEN
            END
        ELSE
            echo $line
            alived=APPEND line,alived,(split(","))
        END
    END
    DISPLAY("****User ID",center(10)+"**User Password",center(10)+"**Balance",center(10)+"**Loan",center(10)+"**First Name",center(15)+"**Last Name",center(15)+"**Tele No.",center(15)+"**City",center(10)+"**Email",center(15)+"**Account Type",center(15)+"**Age",center(10)+"**")
    DISPLAY("*****",center(10)+"*****",center(10)+"*****",center(10)+"*****",center(10)+"*****",center(10)+"*****",center(10)+"*****",center(10)+"*****",center(10)+"*****",center(10)+"*****",center(10)+"*****",center(10)+"*****",center(10)+"*****")
    FOR i IN RANGE(0,${#ALIVED[@]}-1) DO
        COUNT=$i+1
        DISPLAY("${ALIVED[$i]}[0].center(10)+"**${ALIVED[$i]}[1].center(15)+"**${ALIVED[$i]}[2].center(15)+"**${ALIVED[$i]}[3].center(10)+"**${ALIVED[$i]}[4].center(15)+"**${ALIVED[$i]}[5].center(15)+"**${ALIVED[$i]}[6].center(15)+"**${ALIVED[$i]}[7].center(15)+"**${ALIVED[$i]}[8].center(15)+"**${ALIVED[$i]}[9].center(15)+"**${ALIVED[$i]}[10]")
    END
    GET "Please Enter to continue...(\n"
}

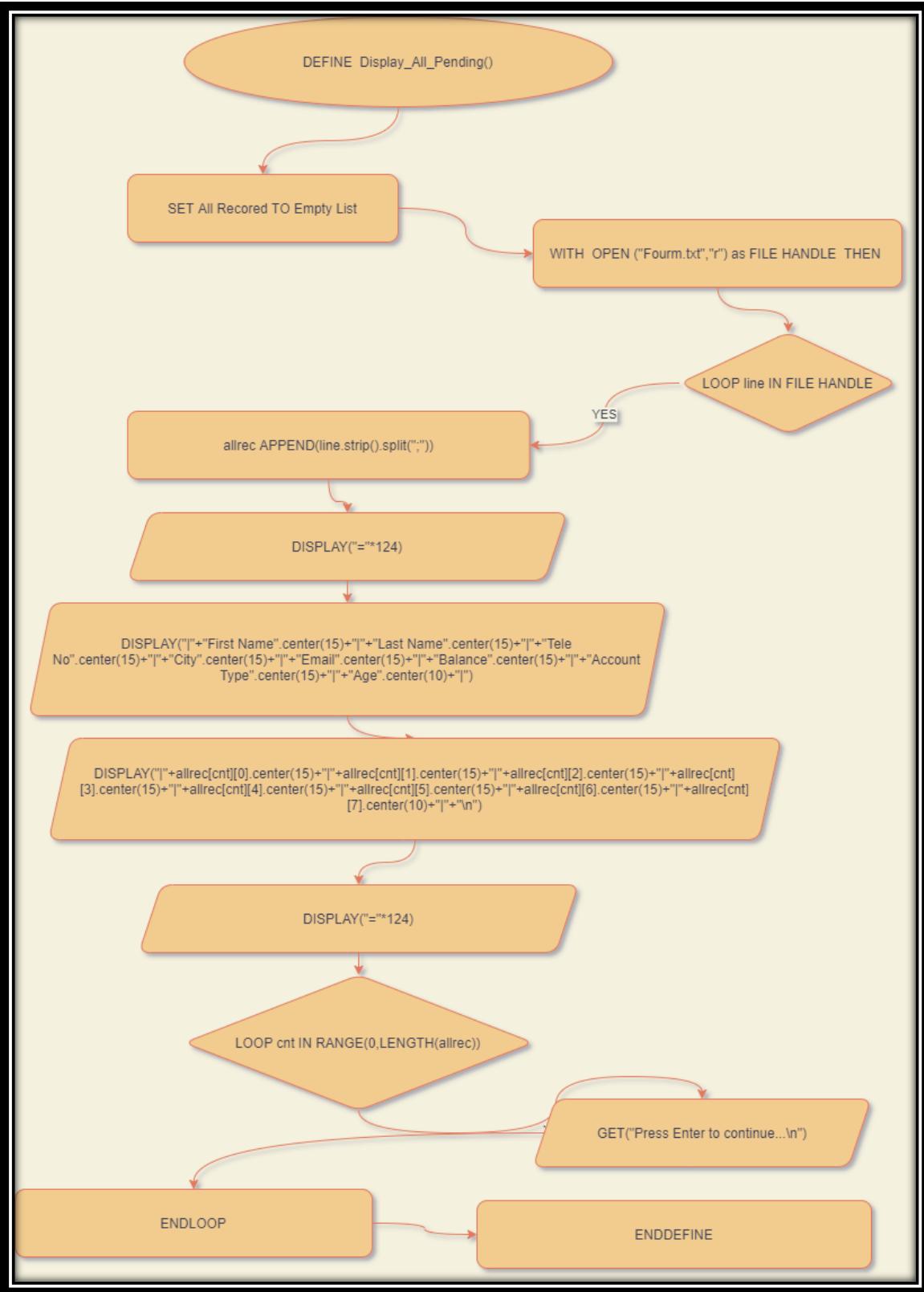
ENDUSR
ENDWITH
ENDFUNCTION

```

And This is The Source of This Function:

15 DISPLAY ALL PENDING:

This The Flowchart of This Function:



This The Pseudo Code of This Function:

```

#A Function That Displays All The Pending Accounts Thats Need To be Opened
DEFINE Display_All_Pending();
SET allrec TO () # TO All Recored
WITH OPEN ("Fourn.txt","r") AS FILE HANDLE THEN
  LOOP ON FILE NAME DO;
    allrec=FILEHANDLE.line.$split();$split(",")$;
    DISPLAY("+"*124)
    PRINT "|"+First Name".center(15)+"|"+Last Name".center(15)+"|"+Tele No".center(15)+"|"+City".center(15)+"|"+Email".center(15)+"|"+Balance".center(15)+"|"+Account Type".center(15)+"|"+Age".center(10)+"|"
    DISPLAY("+"*124)
    LOOP cnt IN RANGE(0,len(allrec)) THRU #cnt Counter
      PRINT "|"+allrec[cnt][0].center(15)+"|"+allrec[cnt][1].center(15)+"|"+allrec[cnt][2].center(15)+"|"+allrec[cnt][3].center(15)+"|"+allrec[cnt][4].center(15)+"|"+allrec[cnt][5].center(15)+"|"+allrec[cnt][6].center(15)+"|"+allrec[cnt][7].center(15)+"|"+allrec[cnt][8].center(10)+"|"+\n"
    GET "Press Enter to continue...\\n"
  ENDOFILE
ENDDEFINE

```

And This is The Source of This Function:

```

#A Function That Displays All The Pending Accounts Thats Need To be Opened
def Display_All_Pending():
  allrec = [] # = All Recored
  with open ("Fourn.txt","r") as fh:
    for line in fh:
      allrec.append(line.strip().split(";"))
  print("+"*124)
  print "|"+First Name".center(15)+"|"+Last Name".center(15)+"|"+Tele No".center(15)+"|"+City".center(15)+"|"+Email".center(15)+"|"+Balance".center(15)+"|"+Account Type".center(15)+"|"+Age".center(10)+"|"
  print("+"*124)
  for cnt in range(0,len(allrec)): #cnt Counter
    print "|"+allrec[cnt][0].center(15)+"|"+allrec[cnt][1].center(15)+"|"+allrec[cnt][2].center(15)+"|"+allrec[cnt][3].center(15)+"|"+allrec[cnt][4].center(15)+"|"+allrec[cnt][5].center(15)+"|"+allrec[cnt][6].center(15)+"|"+allrec[cnt][7].center(15)+"|"+allrec[cnt][8].center(10)+"|"+\n"
  input("Press Enter to continue...\\n")

```

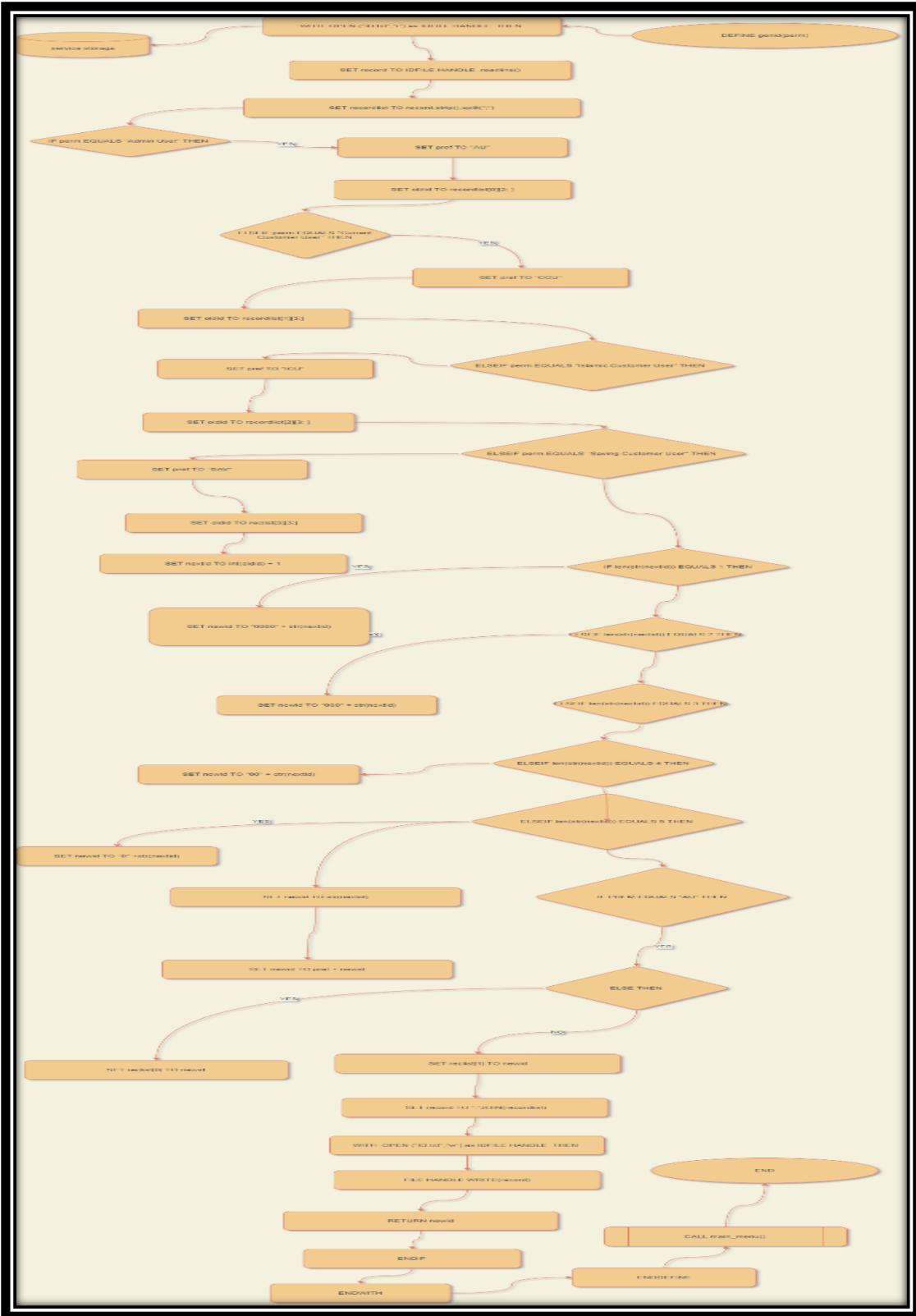
```

:"|"+City".center(15)+"|"+Email".center(15)+"|"+Balance".center(15)+"|"+Account Type".center(15)+"|"+Age".center(10)+"|"
:[2].center(15)+"|"+allrec[cnt][3].center(15)+"|"+allrec[cnt][4].center(15)+"|"+allrec[cnt][5].center(15)+"|"+allrec[cnt][6].center(15)+"|"+allrec[cnt][7].center(15)+"|"+allrec[cnt][8].center(10)+"|"+\n"

```

16 GENERATE ID:

This The Flowchart of This Function:



This The Pseudo Code of This Function:

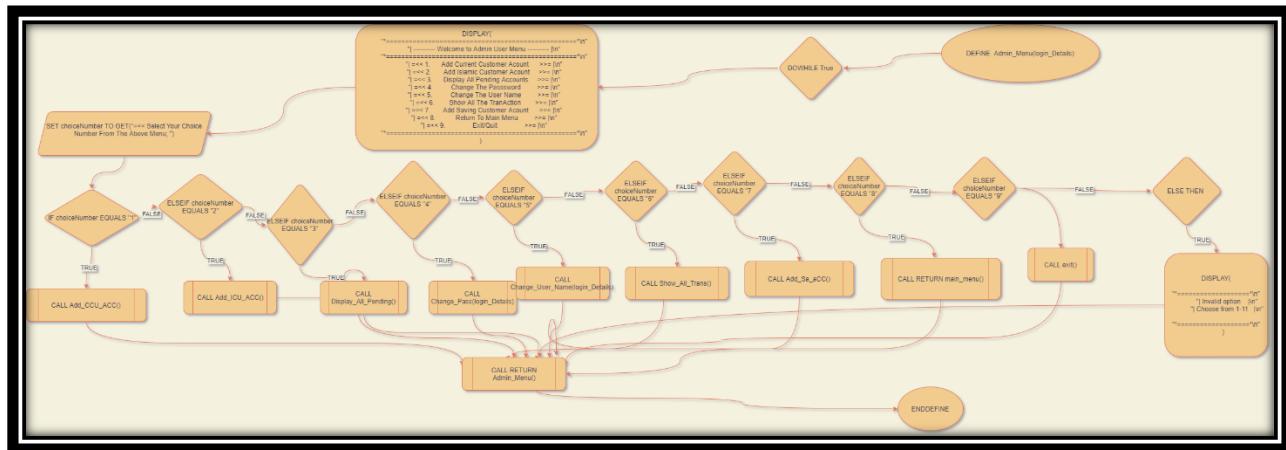
```
#A Fuction That Generate A New ID For A New Account
SET def genid(perm) THEN # genid TO Generate A New ID , Prem TO premeter
    WITH OPEN ("ID.txt","r") as IDFILE HANDLE THEN
        SET record TO IDFILE HANDLE .readline()
        SET recordlist TO record.strip().split(";"")
        IF perm == "Admin User" THEN
            SET pref TO "AU" #pref TO Prefex
            SET oldid TO recordlist[0][2 : ]
        ELSEIF perm == "Current Customer User" THEN
            SET pref TO "CCU"
            SET oldid TO recordlist[1][3 : ]
        ELSEIF perm == "Islamic Customer User" THEN
            SET pref TO "ICU"
            SET oldid TO recordlist[2][3 : ]
        ELSEIF perm == "Saving Customer User" THEN
            SET pref TO "SAV"
            SET oldid TO recordlist[3][3 : ]
        SET nextid TO int(oldid) + 1
        IF LENGTH(STRING(nextid)) == 1 THEN
            SET newid TO "0000" + STRING(nextid)
        ELSEIF LENGTH(STRING(nextid)) == 2 THEN
            SET newid TO "000" + STRING(nextid)
        ELSEIF LENGTH(STRING(nextid)) == 3 THEN
            SET newid TO "00" + STRING(nextid)
        ELSEIF LENGTH(STRING(nextid)) == 4 THEN
            SET newid TO "0" + STRING(nextid)
        ELSEIF LENGTH(STRING(nextid)) == 5 THEN
            SET newid TO STRING(nextid)
        SET newid TO pref + newid
        IF perm == "Admin User" THEN
            SET recordlist[0] TO newid
        ELSE THEN
            SET recordlist[1] TO newid
        SET record TO ";"JOIN(recordlist)
        WITH OPEN ("ID.txt","w") as FILE HANDLE THEN
            FILE HANDLE WRITE(record)
            RETURN newid
        ENDIF
    ENDWITH
ENDDEFINE
```

And This is The Source of This Function:

```
#A Function That Generate A New ID For A New Account
def genid(perm): # genid = Generate A New ID , Prem = premeter
    with open ("ID.txt","r") as IDfh:
        record = IDfh.readline()
        recordlist = record.strip().split(";")
        if perm == "Admin User":
            pref = "AU" #pref = Prefix
            oldid = recordlist[0][2:]
        elif perm == "Current Customer User":
            pref = "CCU"
            oldid = recordlist[1][3:]
        elif perm == "Islamic Customer User":
            pref = "ICU"
            oldid = recordlist[2][3:]
        elif perm == "Saving Customer User":
            pref = "SAV"
            oldid = recordlist[3][3:]
        nextid = int(oldid) + 1
        if len(str(nextid)) == 1:
            newid = "0000" + str(nextid)
        elif len(str(nextid)) == 2:
            newid = "000" + str(nextid)
        elif len(str(nextid)) == 3:
            newid = "00" + str(nextid)
        elif len(str(nextid)) == 4:
            newid = "0" + str(nextid)
        elif len(str(nextid)) == 5:
            newid = str(nextid)
        newid = pref + newid
        if perm == "Admin User":
            recordlist[0] = newid
        else:
            recordlist[1] = newid
        record = ";" .join(recordlist)
        with open ("ID.txt","w") as fh:
            fh.write(record)
    return newid
```

17 ADMIN MENU:

This The Flowchart of This Function:



This The Pseudo Code of This Function:

```

#A Function That Displays The Admin Customer Menu
DEFINE Admin_Menu(login_Details) THEN
    DOWHILE True THEN
        DISPLAY(
        "=====*\n"
        "| ----- Welcome to Admin User Menu ----- |\n"
        "=====*\n"
        "| << 1.      Add Current Customer Account    >>= |\n"
        "| << 2.      Add Islamic Customer Account    >>= |\n"
        "| << 3.      Display All Pending Accounts    >>= |\n"
        "| << 4.      Change The Password            >>= |\n"
        "| << 5.      Change The User Name           >>= |\n"
        "| << 6.      Show All The TranAction         >>= |\n"
        "| << 7.      Add Saving Customer Account     >>= |\n"
        "| << 8.      Return To Main Menu             >>= |\n"
        "| << 9.      Exit/Quit                      >>= |\n"
        "=====*\n"
    )
    SET choiceNumber TO GET("=<< Select Your Choice Number From The Above Menu; \n")

    IF choiceNumber == "1" THEN
        CALL Add_CCU_ACC()#Add Current Customer User
        CALL RETURN Admin_Menu(login_Details)

    ELSEIF choiceNumber == "2" THEN
        CALL Add_ICU_ACC()#Add Islamic Customer User
        CALL RETURN Admin_Menu(login_Details)

    ELSEIF choiceNumber == "3" THEN
        CALL Display_All_Pending()
        CALL RETURN Admin_Menu(login_Details)

    ELSEIF choiceNumber == "4" THEN
        CALL Change_Pass(login_Details)# Change The Password
        CALL RETURN Admin_Menu(login_Details)

    ELSEIF choiceNumber == "5" THEN
        CALL Change_User_Name(login_Details)
        CALL RETURN Admin_Menu(login_Details)

    ELSEIF choiceNumber == "6" THEN
        CALL Show_All_Trans()# Show All Users TransAction
        CALL RETURN Admin_Menu(login_Details)

    ELSEIF choiceNumber == "7" THEN
        CALL Add_Sa_aCC() #Add Saving Customer User
        CALL RETURN Admin_Menu(login_Details)

    ELSEIF choiceNumber == "8" THEN
        CALL RETURN main_menu()

    ELSEIF choiceNumber == "9" THEN
        CALL exit()

    ELSE THEN
        DISPLAY(
        "=====*\n"
        "| Invalid option   |\n"
        "| Choose from 1-9 |\n"
        "=====*\n"
    )
    CALL RETURN Admin_Menu()

ENDIF
ENDDO
ENDWITH

```

And This is The Source of This Function:

```
#A Fuction That Displays The Admin Customer Menu
def Admin_Menu(login_Details):
    while True:
        print(
            "*=====\n"
            "| ----- Welcome to Admin User Menu ----- |\n"
            "*=====*\n"
            "| << 1.      Add Current Customer Account      >> |\n"
            "| << 2.      Add Islamic Customer Account      >> |\n"
            "| << 3.      Display All Pending Accounts      >> |\n"
            "| << 4.      Change The Password                >> |\n"
            "| << 5.      Change The User Name               >> |\n"
            "| << 6.      Show All The TranAction           >> |\n"
            "| << 7.      Add Saving Customer Account        >> |\n"
            "| << 8.      Return To Main Menu                >> |\n"
            "| << 9.      Exit/Quit                         >> |\n"
            "*=====*\n")
        choiceNumber = input("=< Select Your Choice Number From The Above Menu; \n")

        if choiceNumber == "1":
            Add_CCU_ACC()#Add Current Customer User #C
            return Admin_Menu(login_Details) #C

        elif choiceNumber == "2":
            Add_ICU_ACC()#Add Islamic Customer User #C
            return Admin_Menu(login_Details) #C

        elif choiceNumber == "3":
            Display_All_Pending() #C
            return Admin_Menu(login_Details) #C

        elif choiceNumber == "4":
            Change_Pass(login_Details)# Change The Password #C
            return Admin_Menu(login_Details) #C

        elif choiceNumber == "5":
            Change_User_Name(login_Details) #C
            return Admin_Menu(login_Details) #C

        elif choiceNumber == "6":
            Show_All_Trans()# Show All Users TransAction #C
            return Admin_Menu(login_Details) #C

        elif choiceNumber == "7":
            Add_Sa_aCC() #Add Saving Customer User #C
            return Admin_Menu(login_Details) #C

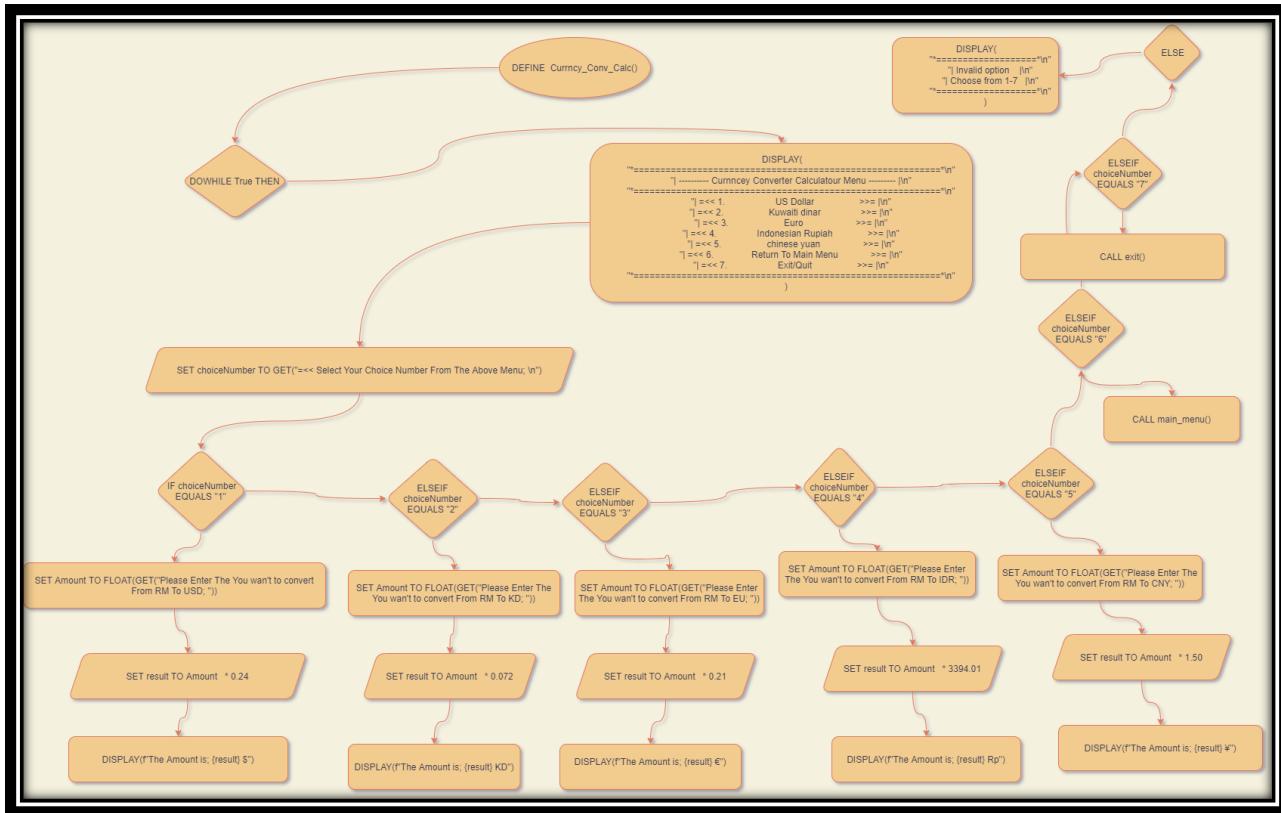
        elif choiceNumber == "8":
            return main_menu() #C

        elif choiceNumber == "9":
            exit() #C

        else:
            print(
                "*=====*\n"
                "| Invalid option   |\n"
                "| Choose from 1-9 |\n"
                "*=====*\n")
    return Admin_Menu() #C
```

18 CURRENCY CONVERTER CALCULATOR:

This is the Flowchart of This Function:



This The Pseudo Code of This Function:

```

#A Fuction That Calculate & Convert The RM into Diffrent Currency's
DEFINE Currnct_Conv_Calc() THEN
    DOWHILE True THEN
        DISPLAY(
            "=====*\n"
            "| ----- Curnnct Converter Calculatour Menu ----- |\n"
            "=====*\n"
            "| << 1.           US Dollar          >>= |\n"
            "| << 2.           Kuwaiti dinar      >>= |\n"
            "| << 3.           Euro              >>= |\n"
            "| << 4.           Indonesian Rupiah >>= |\n"
            "| << 5.           chinese yuan       >>= |\n"
            "| << 6.           Return To Main Menu >>= |\n"
            "| << 7.           Exit/Quit         >>= |\n"
            "=====*\n"
        )
        SET choiceNumber TO GET("=<< Select Your Choice Number From The Above Menu; \n")

        IF choiceNumber == "1" THEN
            SET Amount TO FLOAT(GET("Please Enter The You wan't to convert From RM To USD; "))
            SET result TO Amount * 0.24
            DISPLAY(f"The Amount is; {result} $")

        ELSEIF choiceNumber == "2" THEN
            SET Amount TO FLOAT(GET("Please Enter The You wan't to convert From RM To KD; "))
            SET result TO Amount * 0.072
            DISPLAY(f"The Amount is; {result} KD")

        ELSEIF choiceNumber == "3" THEN
            SET Amount TO FLOAT(GET("Please Enter The You wan't to convert From RM To EU; "))
            SET result TO Amount * 0.21
            DISPLAY(f"The Amount is; {result} €")

        ELSEIF choiceNumber == "4" THEN
            SET Amount TO FLOAT(GET("Please Enter The You wan't to convert From RM To IDR; "))
            SET result TO Amount * 3394.01
            DISPLAY(f"The Amount is; {result} Rp")

        ELSEIF choiceNumber == "5" THEN
            SET Amount TO FLOAT(GET("Please Enter The You wan't to convert From RM To CNY; "))
            SET result TO Amount * 1.50
            DISPLAY(f"The Amount is; {result} ¥")

        ELSEIF choiceNumber == "6" THEN
            CALL main_menu()

        ELSEIF choiceNumber == "7" THEN
            CALL exit()

        ELSE THEN
            DISPLAY(
                "=====*\n"
                "| Invalid option   |\n"
                "| Choose from 1-7  |\n"
                "=====*\n"
            )
    ENDIF
    ENDDO
ENDDEFINE

```

And This is The Source of This Function:

```
#A Fuction That Calculate & Convert The RM into Diffrent Currency's
def Currncy_Conv_Calc():
    while True:
        print(
            "=====*\n"
            "| ----- Curnncey Converter Calculatour Menu ----- |\n"
            "=====*\n"
            "| << 1.           US Dollar          >>= |\n"
            "| << 2.           Kuwaiti dinar       >>= |\n"
            "| << 3.           Euro               >>= |\n"
            "| << 4.           Indonesian Rupiah   >>= |\n"
            "| << 5.           chinese yuan       >>= |\n"
            "| << 6.           Return To Main Menu >>= |\n"
            "| << 7.           Exit/Quit         >>= |\n"
            "=====*\n")
        choiceNumber = input("=<< Select Your Choice Number From The Above Menu; \n")

        if choiceNumber == "1":
            Amount = float(input("Please Enter The You wan't to convert From RM To USD; "))
            result = Amount * 0.24
            print(f"The Amount is; {result} $")

        elif choiceNumber == "2":
            Amount = float(input("Please Enter The You wan't to convert From RM To KD; "))
            result = Amount * 0.072
            print(f"The Amount is; {result} KD")

        elif choiceNumber == "3":
            Amount = float(input("Please Enter The You wan't to convert From RM To EU; "))
            result = Amount * 0.21
            print(f"The Amount is; {result} €")

        elif choiceNumber == "4":
            Amount = float(input("Please Enter The You wan't to convert From RM To IDR; "))
            result = Amount * 3394.01
            print(f"The Amount is; {result} Rp")

        elif choiceNumber == "5":
            Amount = float(input("Please Enter The You wan't to convert From RM To CNY; "))
            result = Amount * 1.50
            print(f"The Amount is; {result} ¥")

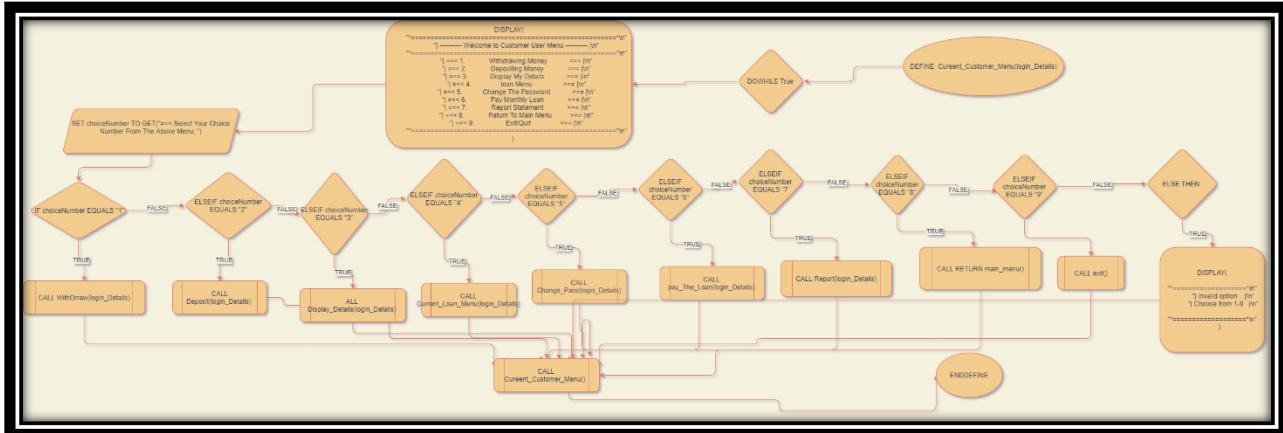
        elif choiceNumber == "6":
            main_menu() #C

        elif choiceNumber == "7":
            exit() #C

        else:
            print(
                "=====*\n"
                "| Invalid option  |\n"
                "| Choose from 1-7 |\n"
                "=====*\n")
    Currncy_Conv_Calc()
```

19 CUREENT CUSTOMER MENU:

This The Flowchart of This Function:



This The Pseudo Code of This Function:

```
#A Function That Displays The Current Customer Menu
DEFINE Cureent_Customer_Menu(login_Details) THEN
    DOWHILE True THEN
        DISPLAY(
            "=====*\n"
            "| ----- Welcome to Customer User Menu ----- |\n"
            "=====*\n"
            "| << 1.          Withdrawing Money      >>= |\n"
            "| << 2.          Depositing Money       >>= |\n"
            "| << 3.          Display My Details     >>= |\n"
            "| << 4.          loan Menu           >>= |\n"
            "| << 5.          Change The Password   >>= |\n"
            "| << 6.          Pay Monthly Loan      >>= |\n"
            "| << 7.          Report Statement      >>= |\n"
            "| << 8.          Return To Main Menu   >>= |\n"
            "| << 9.          Exit/Quit           >>= |\n"
            "=====*\n"
        )

        SET choiceNumber TO GET("=<< Select Your Choice Number From The Above Menu; \n")

        IF choiceNumber == "1" THEN
            CALL WithDraw(login_Details)

        ELSEIF choiceNumber == "2" THEN
            CALL Deposit(login_Details)

        ELSEIF choiceNumber == "3" THEN
            CALL Display_Details(login_Details)

        ELSEIF choiceNumber == "4" THEN
            CALL Current_Loan_Menu(login_Details)

        ELSEIF choiceNumber == "5" THEN
            CALL Change_Pass(login_Details)

        ELSEIF choiceNumber == "6" THEN
            CALL pay_The_Loan(login_Details)

        ELSEIF choiceNumber == "7" THEN
            CALL Report(login_Details)

        ELSEIF choiceNumber == "8" THEN
            CALL RETURN main_menu()

        ELSEIF choiceNumber == "9" THEN
            CALL exit()

        ELSE THEN
            DISPLAY(
                "=====*\n"
                "| Invalid option    |\n"
                "| Choose from 1-8   |\n"
                "=====*\n"
            )
            CALL Cureent_Customer_Menu()

    ENDIF
    ENDDO
ENDDEFINE
```

And This is The Source of This Function:

```
#A Fuction That Displays The Current Customer Menu
def Cureent_Customer_Menu(login_Details):
    while True:
        print()
        """===== Welcome to Customer User Menu ===== \n"""
        """===== ===== \n"""
        "| << 1.          Withdrawing Money      >> | \n"
        "| << 2.          Depositing Money       >> | \n"
        "| << 3.          Display My Details     >> | \n"
        "| << 4.          loan Menu             >> | \n"
        "| << 5.          Change The Password     >> | \n"
        "| << 6.          Pay Monthly Loan       >> | \n"
        "| << 7.          Report Statement       >> | \n"
        "| << 8.          Return To Main Menu     >> | \n"
        "| << 9.          Exit/Quit            >> | \n"
        """===== ===== \n"""

    choiceNumber = input("=<< Select Your Choice Number From The Above Menu; \n")

    if choiceNumber == "1":
        WithDraw(login_Details)

    elif choiceNumber == "2":
        Deposit(login_Details)

    elif choiceNumber == "3":
        Display_Details(login_Details)

    elif choiceNumber == "4":
        Current_Loan_Menu(login_Details)

    elif choiceNumber == "5":
        Change_Pass(login_Details)

    elif choiceNumber == "6":
        pay_The_Loan(login_Details)

    elif choiceNumber == "7":
        Report(login_Details)

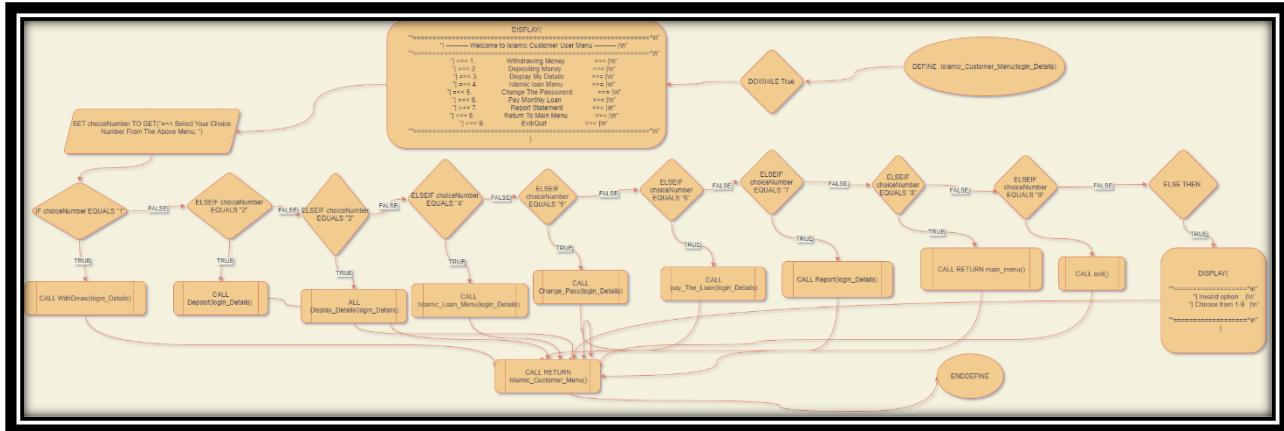
    elif choiceNumber == "8":
        return main_menu()

    elif choiceNumber == "9":
        exit()

    else:
        print(
            """===== \n"""
            "| Invalid option   | \n"
            "| Choose from 1-8 | \n"
            """===== \n"""
        )
        Cureent_Customer_Menu()
```

20 ISLAMIC CUSTOMER MENU:

This The Flowchart of This Function:



This The Pseudo Code of This Function:

```
#A Function That Displays The Islamic Customer Menu
DEFINE Islamic_Customer_Menu(login_Details) THEN
    DOWHILE True THEN
        DISPLAY(
            "-----\n"
            "| ----- Welcome to Islamic Customer User Menu ----- |\n"
            "|-----\n"
            "| << 1.           Withdrawing Money      >>= |\n"
            "| << 2.           Depositing Money       >>= |\n"
            "| << 3.           Display My Details     >>= |\n"
            "| << 4.           Islamic loan Menu      >>= |\n"
            "| << 5.           Change The Password   >>= |\n"
            "| << 6.           Pay Monthly Loan      >>= |\n"
            "| << 7.           Report Statement      >>= |\n"
            "| << 8.           Return To Main Menu    >>= |\n"
            "| << 9.           Exit/Quit             >>= |\n"
            "|-----\n")
        SET choiceNumber TO GET("=<< Select Your Choice Number From The Above Menu; \n")

        IF choiceNumber == "1" THEN
            CALL Withdraw(login_Details)

        ELSEIF choiceNumber == "2" THEN
            CALL Deposit(login_Details)

        ELSEIF choiceNumber == "3" THEN
            CALL Display_Details(login_Details)

        ELSEIF choiceNumber == "4" THEN
            CALL Islamic_Loan_Menu(login_Details)

        ELSEIF choiceNumber == "5" THEN
            CALL Change_Pass(login_Details)

        ELSEIF choiceNumber == "6" THEN
            CALL pay_The_Loan(login_Details)

        ELSEIF choiceNumber == "7" THEN
            CALL Report(login_Details)

        ELSEIF choiceNumber == "8" THEN
            CALL RETURN main_menu()

        ELSEIF choiceNumber == "9" THEN
            CALL exit()

        ELSE THEN
            DISPLAY(
                "-----\n"
                "| Invalid option    |\n"
                "| Choose from 1-9   |\n"
                "-----\n")
    )
    CALL RETURN Islamic_Customer_Menu()
ENDIF
ENDDO
ENDEFINE
```

And This is The Source of This Function:

```
#A Function That Displays The Islamic Customer Menu
def Islamic_Customer_Menu(login_Details):
    while True:
        print(
            "*=====\n"
            "| ----- Welcome to Islamic Customer User Menu ----- |\n"
            "*=====*\n"
            "| << 1.           Withdrawing Money      >>= |\n"
            "| << 2.           Depositing Money       >>= |\n"
            "| << 3.           Display My Details     >>= |\n"
            "| << 4.           Islamic loan Menu       >>= |\n"
            "| << 5.           Change The Passsword   >>= |\n"
            "| << 6.           Pay Monthly Loan      >>= |\n"
            "| << 7.           Report Statement      >>= |\n"
            "| << 8.           Return To Main Menu    >>= |\n"
            "| << 9.           Exit/Quit             >>= |\n"
            "*=====*\n"
        )

        choiceNumber = input("=<< Select Your Choice Number From The Above Menu; \n")

        if choiceNumber == "1":
            Withdraw(login_Details)

        elif choiceNumber == "2":
            Deposit(login_Details)

        elif choiceNumber == "3":
            Display_Details(login_Details)

        elif choiceNumber == "4":
            Islamic_Loan_Menu(login_Details)

        elif choiceNumber == "5":
            Change_Pass(login_Details)

        elif choiceNumber == "6":
            pay_The_Loan(login_Details)

        elif choiceNumber == "7":
            Report(login_Details)

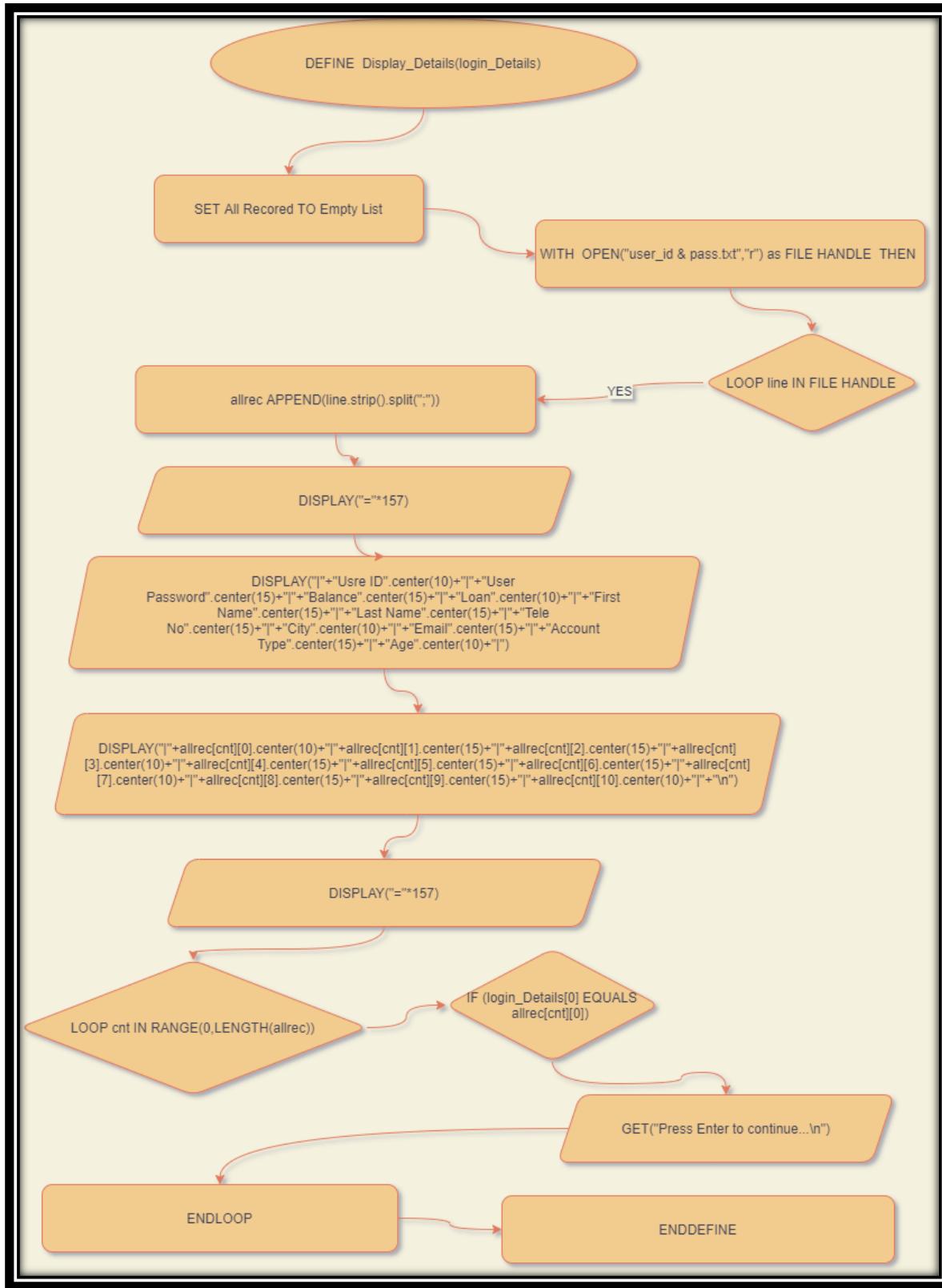
        elif choiceNumber == "8":
            return main_menu()

        elif choiceNumber == "9":
            exit()

        else:
            print(
                "*=====*\n"
                "| Invalid option | \n"
                "| Choose from 1-9 | \n"
                "*=====*\n"
            )
            return Islamic_Customer_Menu()
```

21 DISPLAY DETAILS:

This The Flowchart of This Function:



This The Pseudo Code of This Function:

```

#A Function That Display's All Account Details
DEFINE Display_Details(Login_Details) THEN
    GET allrec["user_id & pass.txt","r"] as FILE HANDLE
    WHILE OPEN("user_id & pass.txt","r") DO
        LOOP line IN FILE HANDLE THEN
            DISPLAY("User ID".center(10)+"|"+"User Password".center(15)+"|"+"Balance".center(15)+"|"+"Loan".center(10)+"|"+"First Name".center(15)+"|"+"Last Name".center(15)+"|"+"Tele No".center(15)+"|"+"Email".center(15)+"|"+"Account Type".center(15)+"|"+"Age".center(10)+"|")
            DISPLAY("+"*15)
        ENDLOOP
        LOOP cnt IN RANGE(0,LENGTH(allrec)) THEN
            IF (Login_Details[0] == allrec[cnt][0]) THEN
                DISPLAY("+"*allrec[cnt][0].center(10)+"|"+"allrec[cnt][1].center(15)+"|"+"allrec[cnt][2].center(15)+"|"+"allrec[cnt][3].center(10)+"|"+"allrec[cnt][4].center(15)+"|"+"allrec[cnt][5].center(15)+"|"+"allrec[cnt][6].center(15)+"|"+"allrec[cnt][7].center(10)+"|"+"allrec[cnt][8].center(15)+"|"+"allrec[cnt][9].center(15)+"|"+"allrec[cnt][10].center(10)+"|"+\n")
            ENDIF
        ENDLOOP
    ENDWITH
ENDFUNCTION

```

```

)|"+"+Tele No".center(15)+"|"+"City".center(10)+"|"+"Email".center(15)+"|"+"Account Type".center(15)+"|"+"Age".center(10)+"|"

|*15)+"|"+"allrec[cnt][5].center(15)+"|"+"allrec[cnt][6].center(15)+"|"+"allrec[cnt][7].center(10)+"|"+"allrec[cnt][8].center(15)+"|"+"allrec[cnt][9].center(15)+"|"+"allrec[cnt][10].center(10)+"|"+\n"

```

And This is The Source of This Function:

```

#A Function That Display's All Account Details
def Display_Details(Login_Details):
    allrec = []
    with open("user_id & pass.txt","r") as fh:
        for line in fh:
            allrec.append(line.strip().split(";"))
    print("-*15)
    print("+"*15)
    print("+"*15)
    print("+"*15)
    for cnt in range(0,len(allrec)):
        if (Login_Details[0] == allrec[cnt][0] :
            print("+"*allrec[cnt][0].center(10)+"|"+"allrec[cnt][1].center(15)+"|"+"allrec[cnt][2].center(15)+"|"+"allrec[cnt][3].center(10)+"|"+"allrec[cnt][4].center(15)+"|"+"allrec[cnt][5].center(15)+"|"+"allrec[cnt][6].center(15)+"|"+"allrec[cnt][7].center(15)+"|"+"allrec[cnt][8].center(15)+"|"+"allrec[cnt][9].center(15)+"|"+"allrec[cnt][10].center(10)+"|"+\n")
        input("Press Enter to continue...")
    
```

```

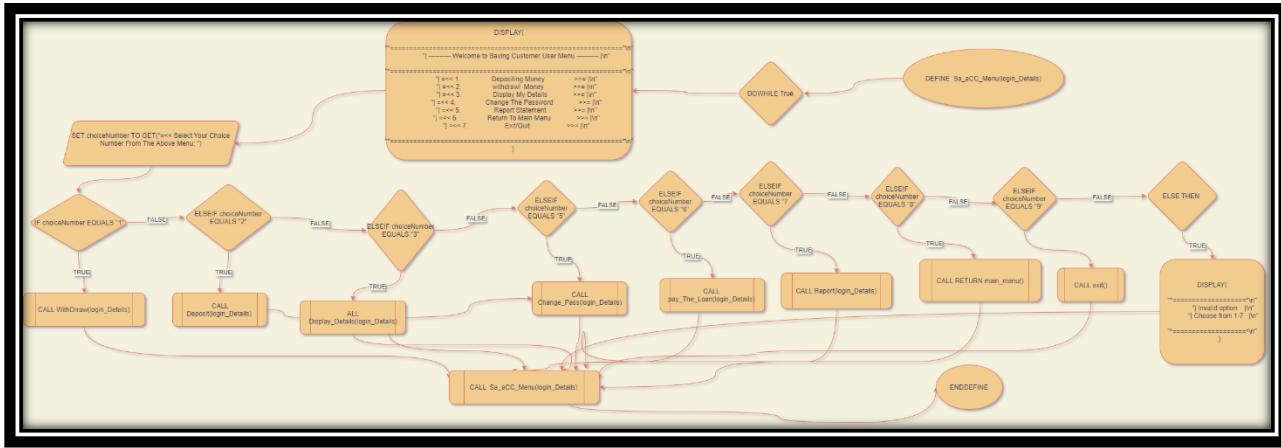
|"+"+Tele No".center(15)+"|"+"City".center(10)+"|"+"Email".center(15)+"|"+"Account Type".center(15)+"|"+"Age".center(10)+"|"

|*15)+"|"+"allrec[cnt][5].center(15)+"|"+"allrec[cnt][6].center(15)+"|"+"allrec[cnt][7].center(10)+"|"+"allrec[cnt][8].center(15)+"|"+"allrec[cnt][9].center(15)+"|"+"allrec[cnt][10].center(10)+"|"+\n"

```

22 SAVING ACCOUNT MENU:

This The Flowchart of This Function:



This The Pseudo Code of This Function:

```
#A Function That Display's The Saving Account Menu
DEFINE Sa_aCC_Menu(login_Details) THEN
    DOWHILE True THEN
        DISPLAY(
            "-----\n"
            "| ----- Welcome to Saving Customer User Menu ----- |\n"
            "-----\n"
            "| << 1.             Depositing Money      >>= |\n"
            "| << 2.             withdraw Money       >>= |\n"
            "| << 3.             Display My Details   >>= |\n"
            "| << 4.             Change The Password >>= |\n"
            "| << 5.             Report Statement     >>= |\n"
            "| << 6.             Return To Main Menu >>= |\n"
            "| << 7.             Exit/Quit           >>= |\n"
            "-----\n"
        )

        SET choiceNumber TO GET("=<< Select Your Choice Number From The Above Menu; \n")

        IF choiceNumber == "1" THEN
            CALL Deposit(login_Details)

        ELSEIF choiceNumber == "2" THEN
            CALL WithDrraw(login_Details)

        ELSEIF choiceNumber == "3" THEN
            CALL Display_Details()

        ELSEIF choiceNumber == "4" THEN
            CALL Change_Pass(login_Details)

        ELSEIF choiceNumber == "5" THEN
            CALL Report(login_Details)

        ELSEIF choiceNumber == "6" THEN
            CALL main_menu()

        ELSEIF choiceNumber == "7" THEN
            CALL exit()

        ELSE THEN
            DISPLAY(
                "-----\n"
                "| Invalid option    |\n"
                "| Choose from 1-7   |\n"
                "-----\n"
            )
            CALL RETURN Sa_aCC_Menu()

    ENDIF
    ENDDO
ENDDEFINE
```

And This is The Source of This Function:

```
#A Fuction That Display's The Saving Account Menu
def Sa_aCC_Menu(login_Details):
    while True:
        print(
            "*-----*\n"
            "| ----- Welcome to Saving Customer User Menu ----- |\n"
            "*-----*\n"
            "| << 1.           Depositing Money      >>= |\n"
            "| << 2.           withdraw Money       >>= |\n"
            "| << 3.           Display My Details   >>= |\n"
            "| << 4.           Change The Password  >>= |\n"
            "| << 5.           Report Statement     >>= |\n"
            "| << 6.           Return To Main Menu  >>= |\n"
            "| << 7.           Exit/Quit          >>= |\n"
            "*-----*\n")
        choiceNumber = input("=<< Select Your Choice Number From The Above Menu; \n")

        if choiceNumber == "1":
            Deposit(login_Details)

        elif choiceNumber == "2":
            WithDrraw(login_Details)

        elif choiceNumber == "3":
            Display_Details()

        elif choiceNumber == "4":
            Change_Pass(login_Details)

        elif choiceNumber == "5":
            Report(login_Details)

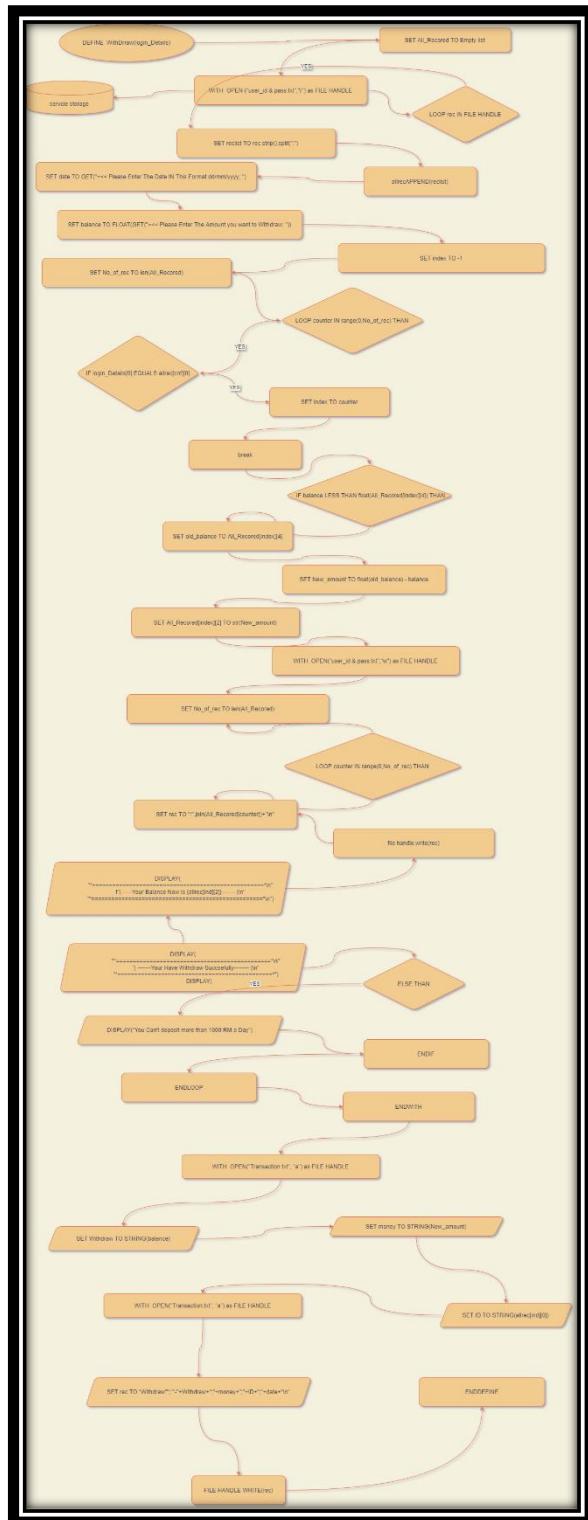
        elif choiceNumber == "6":
            main_menu()

        elif choiceNumber == "7":
            exit()

        else:
            print(
                "*-----*\n"
                "| Invalid option   |\n"
                "| Choose from 1-7 |\n"
                "*-----*\n")
    return Sa_aCC_Menu()
```

23 WITHDRAW:

This The Flowchart of This Function:



This The Pseudo Code of This Function:

```

#A Function That Make The Withdraw TransAction For The Customers
DEFINE WithDraw(login_Details) THEN
    SET allrec TO []# TO All Recorded
    WITH OPEN ("user_id & pass.txt","r") as FILE HANDLE THEN
        LOOP rec IN FILE HANDLE THEN
            SET reclist TO rec.strip().split(";")
            allrecAPPEND(reclist)
        DOWHILE True THEN
            TRY THEN
                SET balance TO FLOAT(GET("=<< Please Enter The Amount you want to Withdraw; "))
                BREAK
            EXCEPT ValueError THEN
                DISPLAY("=<< Please Enter A Valid Amount =>>")
            SET date TO GET("=<< Please Enter The Date IN This Format dd/mm/yyyy; ")
            DOWHILE "/" not IN date THEN
                SET date TO GET("=<< Please Enter A A Valid Date IN This Format dd/mm/yyyy; ")
            SET ind TO -1 #ind TO index
            SET nor TO LENGTH(allrec) #nor TO Number of The Recorded
            LOOP cnt IN RANGE(0,nor) THEN
                IF login_Details[0] == allrec[cnt][0] THEN
                    SET ind TO cnt #cnt TO Counter
                    BREAK
                IF balance < FLOAT(allrec[ind][2]) THEN
                    SET old_balance TO allrec[ind][2]
                    SET New_amount TO FLOAT(old_balance) - balance
                    SET allrec[ind][2] TO STRING(New_amount)
                    WITH OPEN("user_id & pass.txt","w") as FILE HANDLE THEN
                        SET nor TO LENGTH(allrec)
                        LOOP cnt IN RANGE(0,nor) THEN
                            SET rec TO ";"JOIN(allrec[cnt])+"\n"
                            FILE HANDLE WRITE(rec)
                        DISPLAY(
                            "=====\n"
                            "| -----Your Have withdrawn Succsefully----- |\n"
                            "=====\n"
                            DISPLAY(
                                "=====\n"
                                "| -----Your Balance Now Is {allrec[ind][2]}----- |\n"
                                "=====\n"
                                WITH OPEN("Transaction.txt", "a") as FILE HANDLE THEN
                                    SET Withdraw TO STRING(balance)
                                    SET money TO STRING(New_amount)
                                    SET ID TO STRING(allrec[ind][0])
                                    WITH OPEN("Transaction.txt", "a") as FILE HANDLE THEN
                                        SET rec TO "Withdraw";"--+Withdraw+"+money+"+ID+"+date+"\n"
                                        FILE HANDLE WRITE(rec)
                                ELSE THEN
                                    DISPLAY(
                                        "=====\n"
                                        "| -----You don't Have Enogh Money----- |\n"
                                        "=====\n"
                                    )
                                    RETURN WithDraw(login_Details)
                                ENDIF
                            ENDWITH
                        ENDDO
                    ENDLOOP
                ENDDEFINE
            
```

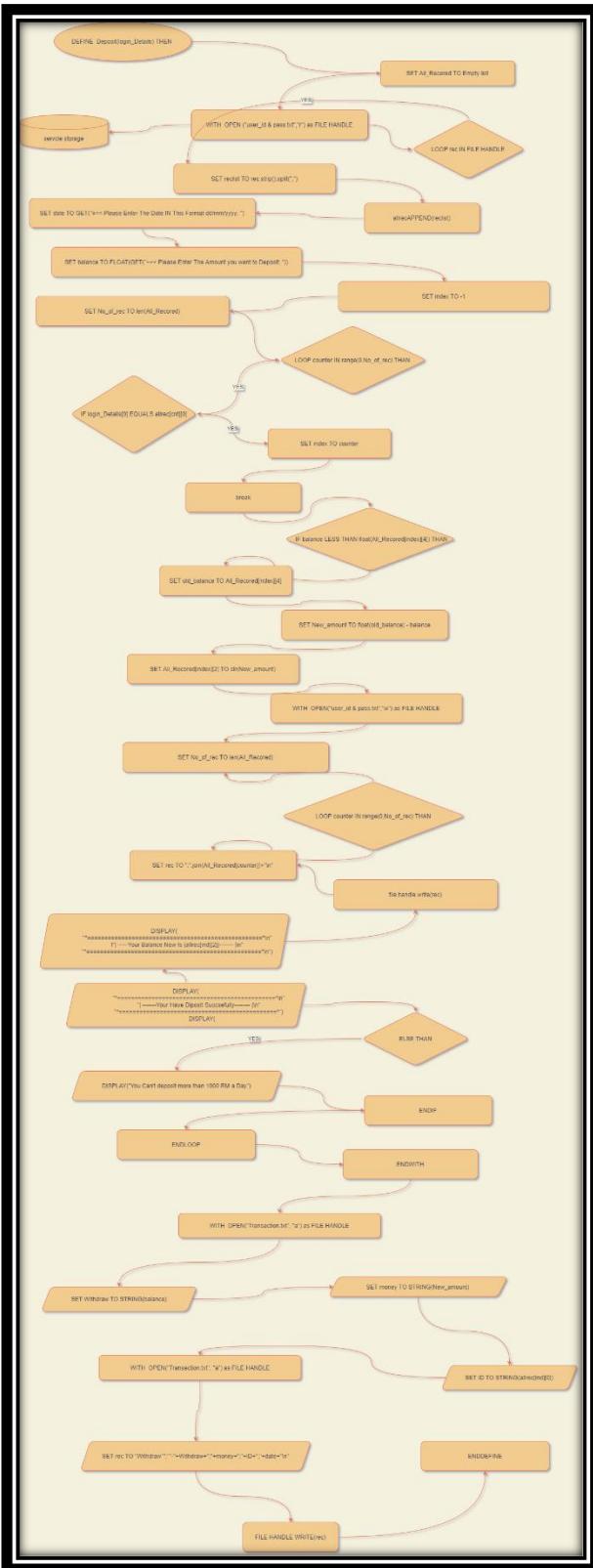
And This is The Source of This Function:

```
#A Fuction That Make The Withdraw TransAction For The Customers
def WithDraw(login_Details):
    allrec = []# = All Recored
    with open ("user_id & pass.txt","r") as fh:
        for rec in fh:
            reclist = rec.strip().split(";")
            allrec.append(reclist)
    while True:
        try:
            balance = float(input("=<< Please Enter The Amount you want to Withdraw; "))
            break
        except ValueError:
            print("=<< Please Enter A Valid Amount =>>")
    date = input("=<< Please Enter The Date in This Format dd/mm/yyyy; ")
    while "/" not in date:
        date = input("=<< Please Enter A A Valid Date in This Format dd/mm/yyyy; ")
    ind = -1 #ind = index
    nor = len(allrec) #nor = Number of The Recoreds
    for cnt in range(0,nor):
        if login_Details[0] == allrec[cnt][0]:
            ind = cnt #cnt = Counter
            break
    if balance < float(allrec[ind][2]):
        old_balance = allrec[ind][2]
        New_amount = float(old_balance) - balance
        allrec[ind][2] = str(New_amount)
        with open("user_id & pass.txt","w") as fh:
            nor = len(allrec)
            for cnt in range(0,nor):
                rec = ";" .join(allrec[cnt])+"\n"
                fh.write(rec)
            print(
                "*-----*\n"
                "| -----Your Have withdrawn Succsefully----- | \n"
                "*-----*\n")
            print(
                "*-----*\n"
                f" | -----Your Balance Now Is {allrec[ind][2]} ----- | \n"
                "*-----*\n")
            with open("Transaction.txt", "a") as fh:
                Withdraw = str(balance)
                money = str(New_amount)
                ID = str(allrec[ind][0])
                with open("Transaction.txt", "a") as fh:
                    rec = "Withdraw";"-"+Withdraw+"-"+money+"-"+ID+"-"+date+"\n"
                    fh.write(rec)

    else:
        print(
            "*-----*\n"
            "| -----You don't Have Enogh Money----- | \n"
            "*-----*\n")
    return WithDraw(login_Details)
```

24 DEPOSIT:

This The Flowchart of This Function:



This The Pseudo Code of This Function:

```

#A Fuction That Make The Deposit TransAction For The Customers
DEFINE Deposit(login_Details) THEN
    SET allrec TO [] # TO All Recored
    WITH OPEN ("user_id & pass.txt","r") as FILE HANDLE THEN
        SET for rec IN FILE HANDLE THEN #Rec TO Recored
            SET reclist TO rec.strip().split(";");
            allrecAPPEND(reclist)
    DOWHILE True THEN
        TRY THEN
            SET balance TO FLOAT(GET("=<< Please Enter The Amount you want to Deposit; "))
            BREAK
        EXCEPT ValueError THEN
            DISPLAY("=<< Please Enter A Valid Amount =>>")
        SET date TO GET("=<< Please Enter The Date IN This Format dd/mm/yyyy; ")
    DOWHILE "/" not IN date THEN
        SET date TO GET("=<< Please Enter A A Valid Date IN This Format dd/mm/yyyy; ")
    SET ind TO -1#ind TO index
    SET nor TO LENGTH(allrec)#nor TO Number of The Recoreds
    SET for cnt IN RANGE(0,nor) THEN #cnt TO Counter
        IF login_Details[0] == allrec[cnt][0] THEN
            SET ind TO cnt
            BREAK
    IF balance < 10000 THEN
        SET old_balance TO allrec[ind][2]
        SET New_amount TO FLOAT(old_balance) + balance
        SET allrec[ind][2] TO STRING(New_amount)
        WITH OPEN("user_id & pass.txt","w") as FILE HANDLE THEN
            SET nor TO LENGTH(allrec)
            LOOP cnt IN RANGE(0,nor) THEN
                SET rec TO ";"JOIN(allrec[cnt])+"\n"
                FILE HANDLE WRITE(rec)
            DISPLAY(
                "=====*\n"
                "| -----Your Have Diposit Succsefully----- |\n"
                "=====*\n"
                DISPLAY(
                    "=====*\n"
                    f"| -----Your Balance Now Is {allrec[ind][2]}----- |\n"
                    "=====*\n"
                    WITH OPEN("Transaction.txt", "a") as FILE HANDLE THEN
                        SET Deposite TO STRING(balance)
                        SET money TO STRING(New_amount)
                        SET ID TO STRING(allrec[ind][0])
                        WITH OPEN("Transaction.txt", "a") as FILE HANDLE THEN
                            SET rec TO "Deposit";"+Deposite+";"+money+";"+ID+";"+date+"\n"
                            FILE HANDLE WRITE(rec)
                ELSE THEN
                    DISPLAY(
                        "=====*\n"
                        "| -----You Can't deposit more than 10000 RM a Day----- |\n"
                        "=====*\n"
                    RETURN Deposit(login_Details)

                ENDIF'
            ENDWITH
        ENDDO
    ENDDFINE

```

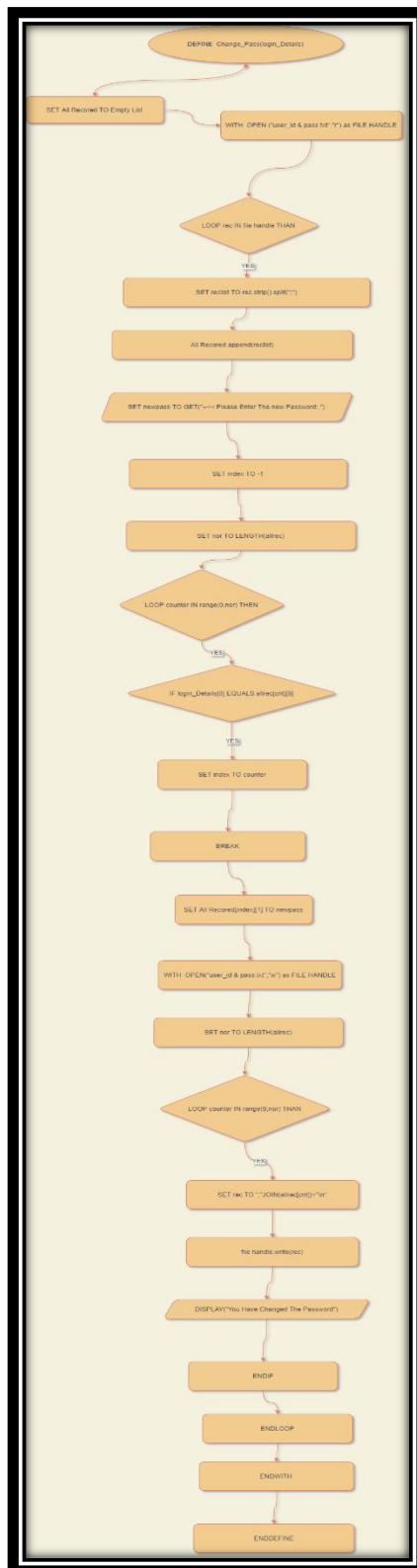
And This is The Source of This Function:

```
#A Fuction That Make The Deposit TransAction For The Customers
def Deposit(login_Details):
    allrec = [] # = All Recored
    with open ("user_id & pass.txt","r") as fh:
        for rec in fh:#Rec = Recored
            reclist = rec.strip().split(";;")
            allrec.append(reclist)
    while True:
        try:
            balance = float(input("=<< Please Enter The Amount you want to Deposit; "))
            break
        except ValueError:
            print("=<< Please Enter A Valid Amount =>>")
    date = input("=<< Please Enter The Date in This Format dd/mm/yyyy; ")
    while "/" not in date:
        date = input("=<< Please Enter A A Valid Date in This Format dd/mm/yyyy; ")
    ind = -1#ind = index
    nor = len(allrec)#nor = Number of The Recoreds
    for cnt in range(0,nor): #cnt = Counter
        if login_Details[0] == allrec[cnt][0]:
            ind = cnt
            break
    if balance < 10000:
        old_balance = allrec[ind][2]
        New_amount = float(old_balance) + balance
        allrec[ind][2] = str(New_amount)
        with open("user_id & pass.txt","w") as fh:
            nor = len(allrec)
            for cnt in range(0,nor):
                rec = ";" .join(allrec[cnt]) + "\n"
                fh.write(rec)
            print(
                "*****\n"
                "| -----Your Have Diposit Succsefully----- | \n"
                "*****")
            print(
                "*****\n"
                f" | -----Your Balance Now Is {allrec[ind][2]}----- | \n"
                "*****\n")
            with open("Transaction.txt", "a") as fh:
                Deposite = str(balance)
                money = str(New_amount)
                ID = str(allrec[ind][0])
                with open("Transaction.txt", "a") as fh:
                    rec = "Deposit";"+Deposite+";"+money+";"+ID+";"+date+"\n"
                    fh.write(rec)

    else:
        print(
            "*****\n"
            "| -----You Can't deposit more than 10000 RM a Day----- | \n"
            "*****")
    return Deposit(login_Details)
```

25 CHANGE PASSWORD:

This The Flowchart of This Function:



This The Pseudo Code of This Function:

```
#A Function That Change The Password For The Super, Admin AND Customer Users
DEFINE Change_Pass(login_Details) THEN
    SET allrec TO []# TO All Recorded
    WITH OPEN ("user_id & pass.txt","r") as FILE HANDLE THEN
        SET for rec IN FILE HANDLE THEN #Rec TO Recored
            SET reclist TO rec.strip().split(";")
            allrecAPPEND(reclist)
        SET newpass TO GET("=<< Please Enter The new Password; ")
        SET ind TO -1 #ind TO index
        SET nor TO LENGTH(allrec)#nor TO Number of The Recoreds
        SET for cnt IN RANGE(0,nor) THEN #cnt TO Counter
            IF login_Details[0] == allrec[cnt][0] THEN
                SET ind TO cnt
                BREAK
            SET allrec[ind][1] TO newpass
            WITH OPEN("user_id & pass.txt","w") as FILE HANDLE THEN
                SET nor TO LENGTH(allrec)
                LOOP cnt IN RANGE(0,nor) THEN
                    SET rec TO ";"JOIN(allrec[cnt])+"\n"
                    FILE HANDLE WRITE(rec)
                DISPLAY(
                    "-----\n"
                    "| -----Your Password Have Been Changed Succsefully----- |\n"
                    "-----\n"
                )
            ENDIF
            ENDLOOP
        ENDWITH
    ENDDFINE
```

And This is The Source of This Function:

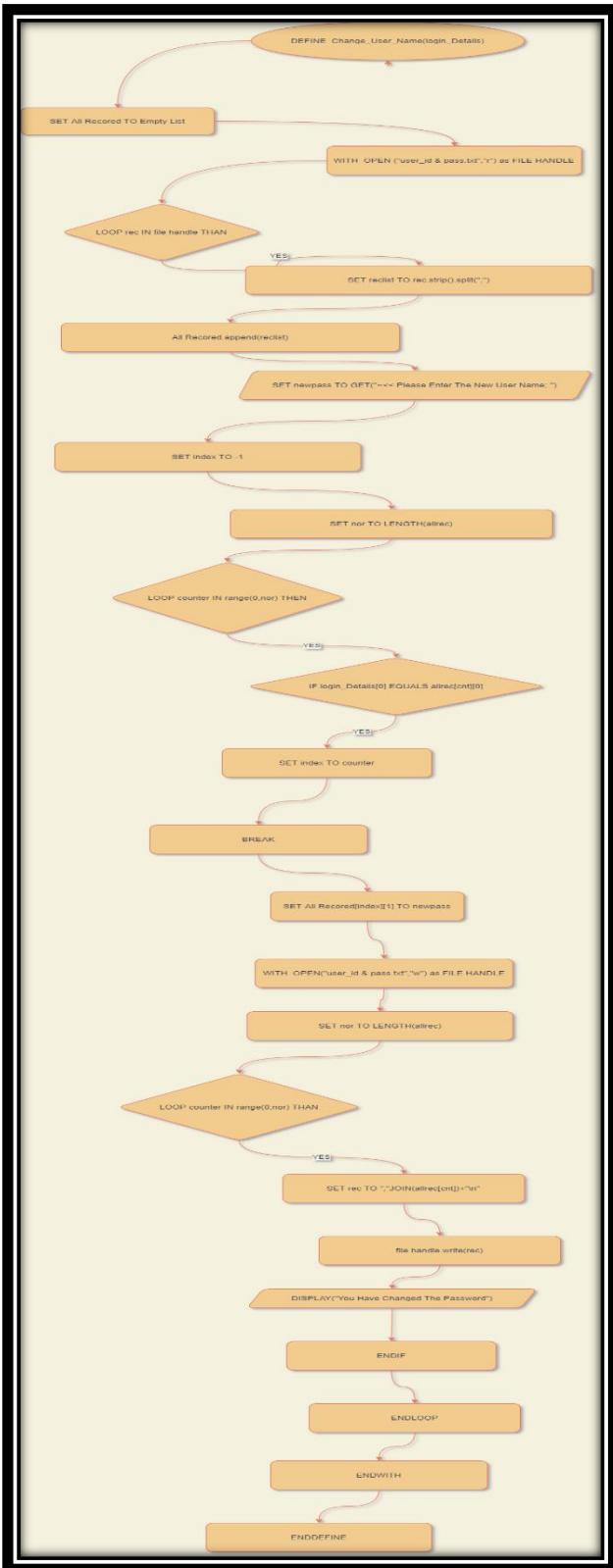
```
#A Fuction That Change The Password For The Super, Admin and Customer Users
def Change_Pass(login_Details):
    allrec = []# = All Recored
    with open ("user_id & pass.txt","r") as fh:
        for rec in fh:#Rec = Recored
            reclist = rec.strip().split(";")
            allrec.append(reclist)
    newpass = input("=<< Please Enter The new Password; ")
    ind = -1 #ind = index
    nor = len(allrec)#nor = Number of The Recoreds
    for cnt in range(0,nor): #cnt = Counter
        if login_Details[0] == allrec[cnt][0]:
            ind = cnt
            break

    allrec[ind][1] = newpass
    with open("user_id & pass.txt","w") as fh:
        nor = len(allrec)
        for cnt in range(0,nor):
            rec = ";" .join(allrec[cnt])+"\n"
            fh.write(rec)
        print(
        "*=====\n"
        "| -----Your Password Have Been Changed Succsefully----- |\n"
        "*=====*\n"
        )


```

26 CHANGE USERNAME:

This The Flowchart of This Function:



This The Pseudo Code of This Function:

```
#A Fuction That Change The User Name Avilibale Only For The Super And Admin User
DEFINE Change_User_Name(login_Details) THEN
    SET allrec TO []# TO All Recored
    WITH OPEN ("user_id & pass.txt","r") as FILE HANDLE THEN
        SET for rec IN FILE HANDLE THEN #Rec TO Recored
            SET reclist TO rec.strip().split(";")
            allrecAPPEND(reclist)
        SET newpass TO GET("=<< Please Enter The New User Name; ")
        SET ind TO -1 #ind TO index
        SET nor TO LENGTH(allrec) #nor TO Number of The Recoreds
        SET for cnt IN RANGE(0,nor) THEN #cnt TO Counter
            IF login_Details[0] == allrec[cnt][0] THEN
                SET ind TO cnt
                BREAK
            ...
            SET allrec[ind][0] TO newpass
        WITH OPEN("user_id & pass.txt","w") as FILE HANDLE THEN
            SET nor TO LENGTH(allrec)
            LOOP cnt IN RANGE(0,nor) THEN
                SET rec TO ";"JOIN(allrec[cnt])+"\n"
                FILE HANDLE WRITE(rec)
            DISPLAY(
                "-----\n"
                "| -----Your User Name Have Changed Succsefully----- |\n"
                "-----\n"
            )
        ENDWITH
    ENDDFINE
```

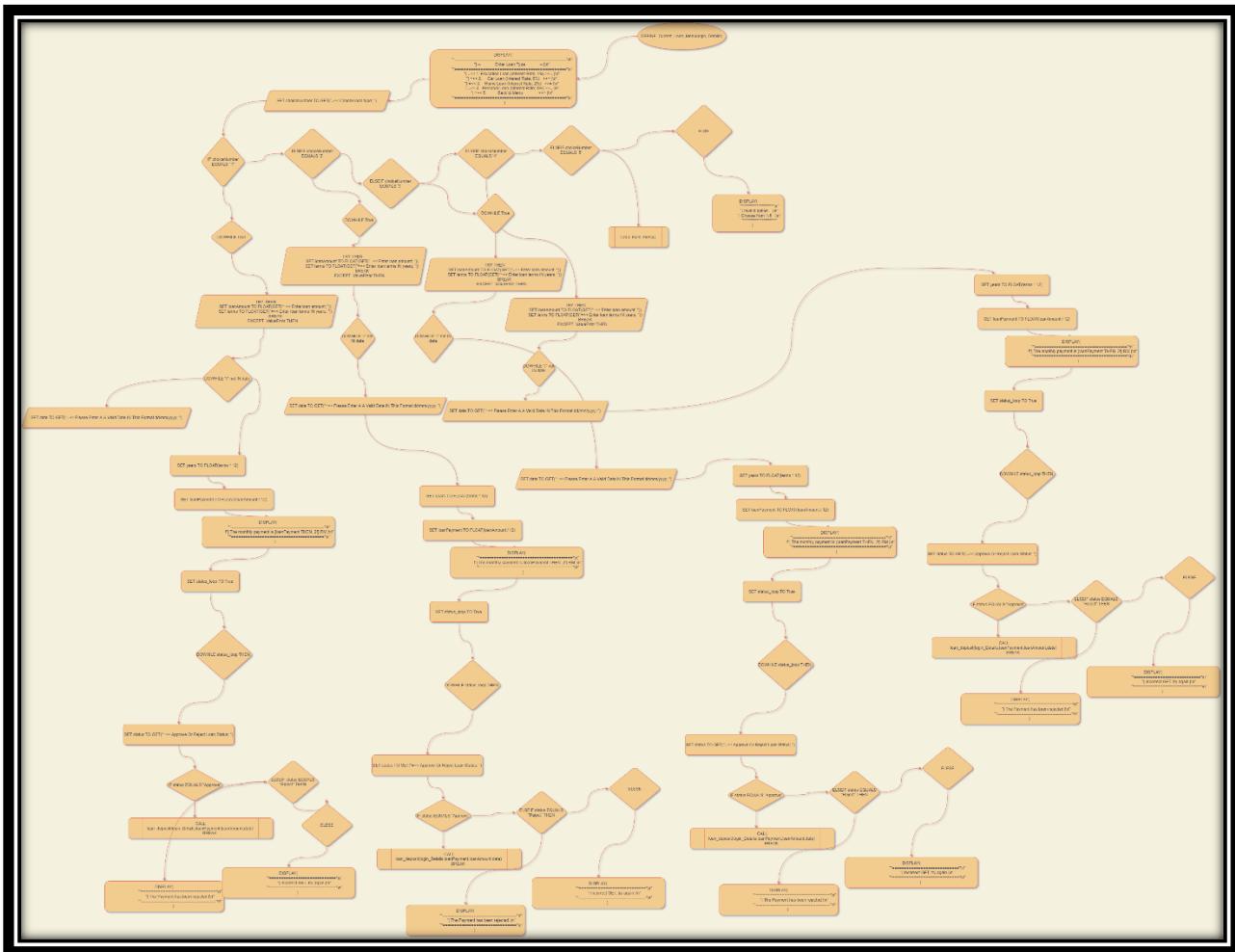
And This is The Source of This Function:

```
#A Fuction That Change The User Name Avilibale Only For The Super And Admin User
def Change_User_Name(login_Details):
    allrec = []# = All Recored
    with open ("user_id & pass.txt","r") as fh:
        for rec in fh: #Rec = Recored
            reclist = rec.strip().split(";")
            allrec.append(reclist)
    newpass = input("=<< Please Enter The New User Name; ")
    ind = -1 #ind = index
    nor = len(allrec) #nor = Number of The Recoreds
    for cnt in range(0,nor): #cnt = Counter
        if 1 (variable) ind: int |rec[cnt][0]:
            ind = cnt
            break

    allrec[ind][0] = newpass
    with open("user_id & pass.txt","w") as fh:
        nor = len(allrec)
        for cnt in range(0,nor):
            rec = ";" .join(allrec[cnt])+"\n"
            fh.write(rec)
        print(
        "*-----*\n"
        "| -----Your User Name Have Changed Succsefully----- |\n"
        "*-----*"
    )
```

27 CURRENT LOAN MENU:

This The Flowchart of This Function:



This The Pseudo Code of This Function:

```

#A Function That Displays A Menu The Loan of Current Account
DEFINE Current_Loan_Menu(login_Details) THEN
    DISPLAY(
        ======\n
        | -- Enter Loan Type -- |\n
        ======\n
        | << 1. Education Loan (Interest Rate; 1%) >>= |\n
        | << 2. Car Loan (Interest Rate; 6%) >>= |\n
        | << 3. Home Loan (Interest Rate; 2%) >>= |\n
        | << 4. Personal Loan (Interest Rate; 8%) >>= |\n
        | << 5. Back to Menu >>= |\n
        ======\n
    )

    SET choiceNumber TO GET("=<< Choose loan type; ")

    IF choiceNumber == "1" THEN
        DOWHILE True THEN
            TRY THEN
                SET loanAmount TO FLOAT(GET("=<< Enter loan amount; "))
                SET terms TO FLOAT(GET("=<< Enter loan terms IN years; "))
                BREAK
            EXCEPT ValueError THEN
                DISPLAY("=<< Please Enter A Valid Amount =>>")
                SET date TO GET("=<< Please Enter The Date IN This Format dd/mm/yyyy; ")
            DOWHILE "/" not IN date THEN
                SET date TO GET("=<< Please Enter A Valid Date IN This Format dd/mm/yyyy; ")
            SET years TO FLOAT(terms * 12)
            SET interestRate TO FLOAT(1 / 100 / 12)
            SET loanPayment TO round(loanAmount * (interestRate * (1 + interestRate) ** years) / (
                (1 + interestRate) ** years - 1))

            DISPLAY(
                ======\n
                f" | The monthly payment is {loanPayment THEN .2f} RM |\n
                ======\n
            )
            SET status_loop TO True
            DOWHILE status_loop THEN
                SET status TO GET("=<< Approve Or Reject Loan Status; ")
                IF status == "Approve" THEN
                    CALL loan_deposit(login_Details, loanPayment, loanAmount, date)
                    BREAK
                ELSEIF status == "Reject" THEN
                    DISPLAY(
                        ======\n
                        | The Payment has been rejected |\n
                        ======\n
                    )
                ELSE THEN
                    DISPLAY(
                        ======\n
                        | Incorrect GET, try again |\n
                        ======\n
                    )
                END IF
            DOWHILE status != "Approve" OR status != "Reject" THEN
                SET status TO GET("=<< Approve Or Reject Loan Status; ")
            END DOWHILE
        END TRY
    ELSEIF choiceNumber == '2' THEN
        DOWHILE True THEN
            TRY THEN
                SET loanAmount TO FLOAT(GET("=<< Enter loan amount; "))
                SET terms TO FLOAT(GET("=<< Enter loan terms IN years; "))
                BREAK
            EXCEPT ValueError THEN
                DISPLAY("=<< Please Enter A Valid Amount =>>")
                SET date TO GET("=<< Please Enter The Date IN This Format dd/mm/yyyy; ")
            DOWHILE "/" not IN date THEN
                SET date TO GET("=<< Please Enter A Valid Date IN This Format dd/mm/yyyy; ")
            END DOWHILE
        END TRY
    END IF
END DEFINE

```

```
ELSEIF choiceNumber == '3' THEN
    DOWHILE True THEN
        TRY THEN
            SET loanAmount TO FLOAT(GET("=<< Enter loan amount; "))
            SET terms TO FLOAT(GET("=<< Enter loan terms IN years; "))
            BREAK
        EXCEPT ValueError THEN
            DISPLAY("=<< Please Enter A Valid Amount =>>")
            SET date TO GET("=<< Please Enter The Date IN This Format dd/mm/yyyy; ")
        DOWHILE "/" not IN date THEN
            SET date TO GET("=<< Please Enter A A Valid Date IN This Format dd/mm/yyyy; ")
        SET years TO FLOAT(terms * 12)
        SET interestRate TO FLOAT(2 / 100 / 12)
        SET loanPayment TO loanAmount * (interestRate * (1 + interestRate) ** years) / (
            (1 + interestRate) ** years - 1)
        DISPLAY(
            "=====\n"
            f" | The monthly payment is {loanPayment THEN .2f} RM |\n"
            "=====\n"
        )

        SET status_loop TO True
        DOWHILE status_loop THEN
            SET status TO GET("=<< Approve Or Reject Loan Status; ")
            IF status == "Approve" THEN
                CALL loan_deposit(login_Details, loanPayment, loanAmount, date)
                BREAK

            ELSEIF status == "Reject" THEN
                DISPLAY(
                    "=====\n"
                    " | The Payment has been rejected |\n"
                    "=====\n"
                )

            ELSE THEN
                DISPLAY(
                    "=====\n"
                    " | Incorrect GET, try again |\n"
                    "=====\n"
                )

        ELSEIF choiceNumber == '4' THEN
            DOWHILE True THEN
                TRY THEN
                    SET loanAmount TO FLOAT(GET("=<< Enter loan amount; "))
                    SET terms TO FLOAT(GET("=<< Enter loan terms IN years; "))
                    BREAK
                EXCEPT ValueError THEN
                    DISPLAY("=<< Please Enter A Valid Amount =>>")
                    SET date TO GET("=<< Please Enter The Date IN This Format dd/mm/yyyy; ")
                DOWHILE "/" not IN date THEN
                    SET date TO GET("=<< Please Enter A A Valid Date IN This Format dd/mm/yyyy; ")
                SET years TO FLOAT(terms * 12)
                SET interestRate TO FLOAT(8 / 100 / 12)
                SET loanPayment TO round(loanAmount * (interestRate * (1 + interestRate) ** years) / (
                    (1 + interestRate) ** years - 1))
                DISPLAY(
                    "=====\n"
                    f" | The monthly payment is {loanPayment THEN .2f} RM |\n"
                    "=====\n"
                )

            SET status_loop TO True
            DOWHILE status_loop THEN
                DOWHILE status_loop THEN
                    SET status TO GET("=<< Approve Or Reject Loan Status; ")
                    IF status == "Approve" THEN
```

```
ELSEIF choiceNumber == '4' THEN
    DOWHILE True THEN
        TRY THEN
            SET loanAmount TO FLOAT(GET("=<< Enter loan amount; "))
            SET terms TO FLOAT(GET("=<< Enter loan terms IN years; "))
            BREAK
        EXCEPT ValueError THEN
            DISPLAY("=<< Please Enter A Valid Amount =>>")
            SET date TO GET("=<< Please Enter The Date IN This Format dd/mm/yyyy; ")
            DOWHILE "/" not IN date THEN
                SET date TO GET("=<< Please Enter A A Valid Date IN This Format dd/mm/yyyy; ")
            SET years TO FLOAT(terms * 12)
            SET interestRate TO FLOAT(8 / 100 / 12)
            SET loanPayment TO round(loanAmount * (interestRate * (1 + interestRate) ** years) / (
                (1 + interestRate) ** years - 1))
            DISPLAY(
                "=====*\n"
                f" | The monthly payment is {loanPayment THEN .2f} RM |\n"
                "=====*\n"
            )
        SET status_loop TO True
        DOWHILE status_loop THEN
            DOWHILE status_loop THEN
                SET status TO GET("=<< Approve Or Reject Loan Status; ")
                IF status == "Approve" THEN
                    CALL loan_deposit(login_Details,loanPayment,loanAmount,date)
                    BREAK
                ELSEIF status == "Reject" THEN
                    DISPLAY(
                        "=====*\n"
                        " | The Payment has been rejected |\n"
                        "=====*\n"
                    )
                ELSE THEN
                    DISPLAY(
                        "=====*\n"
                        " | Incorrect GET, try again |\n"
                        "=====*\n"
                    )
                ENDIF
            ENDWHILE
        ENDWHILE
    ENDWHILE
ENDIF
ENDO
ENDDEFINE
```

And This is The Source of This Function:

```
#A Function That Displays A Menu The Loan of Current Account
def Current_Loan_Menu(login_Details):
    print(
        "*=====\n"
        "| -- Enter Loan Type -- |\n"
        "*=====*\n"
        "| << 1. Education Loan (Interest Rate; 1%) >> |\n"
        "| << 2. Car Loan (Interest Rate; 6%) >> |\n"
        "| << 3. Home Loan (Interest Rate; 2%) >> |\n"
        "| << 4. Personal Loan (Interest Rate; 8%) >> |\n"
        "| << 5. Back to Menu >> |\n"
        "*=====*\n"
    )

    choiceNumber = input("<< Choose loan type; ")

    if choiceNumber == "1":
        while True:
            try:
                loanAmount = float(input("<< Enter loan amount; "))
                terms = float(input("<< Enter loan terms in years; "))
                break
            except ValueError:
                print("<< Please Enter A Valid Amount =>>")
        date = input("<< Please Enter The Date in This Format dd/mm/yyyy; ")
        while "/" not in date:
            date = input("<< Please Enter A A Valid Date in This Format dd/mm/yyyy; ")
        years = float(terms * 12)
        interestRate = float(1 / 100 / 12)
        loanPayment = round(loanAmount * (interestRate * (1 + interestRate) ** years) / (
            (1 + interestRate) ** years - 1))

        print(
            "*=====\n"
            f" | The monthly payment is {loanPayment:.2f} RM |\n"
            "*=====*\n"
        )
        status_loop = True
        while status_loop:
            status = input("<< Approve Or Reject Loan Status; ")
            if status == "Approve":
                loan_deposit(login_Details, loanPayment, loanAmount, date) #C
                break

            elif status == "Reject":
                print(
                    "*=====\n"
                    "| The Payment has been rejected |\n"
                    "*=====*\n"
                )

            else:
                print(
                    "*=====\n"
                    "| Incorrect input, try again |\n"
                    "*=====*\n"
                )

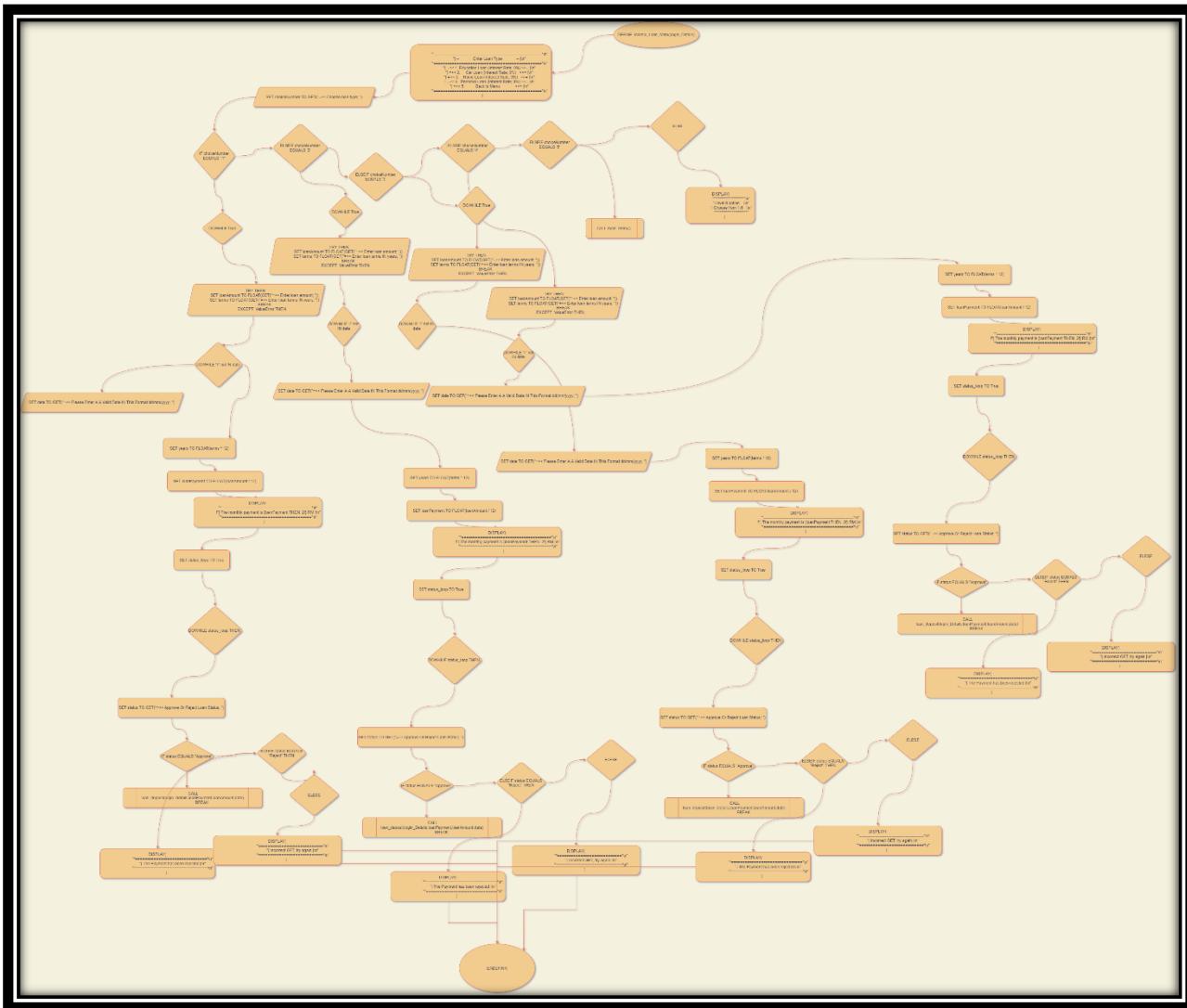
    elif choiceNumber == '2':
        while True:
            try:
                loanAmount = float(input("<< Enter loan amount; "))
                terms = float(input("<< Enter loan terms in years; "))
                break
            except ValueError:
                print("<< Please Enter A Valid Amount =>>")
        date = input("<< Please Enter The Date in This Format dd/mm/yyyy; ")
        while "/" not in date:
            date = input("<< Please Enter A A Valid Date in This Format dd/mm/yyyy; ")
        years = float(terms * 12)
        interestRate = float(6 / 100 / 12)
```

```
3         date = input("=<< Please Enter A A Valid Date in This Format dd/mm/yyyy; ")
4     years = float(terms * 12)
5     interestRate = float(6 / 100 / 12)
6     loanPayment = loanAmount * (interestRate * (1 + interestRate) ** years) / (
7         (1 + interestRate) ** years - 1)
8     print(
9         "*=====*\n"
10        f"|| The monthly payment is {loanPayment:.2f} RM ||\n"
11        "*=====*\n"
12    )
13
14    status_loop = True
15
16    while status_loop:
17        status = input("=<< Approve Or Reject Loan Status; ")
18        if status == "Approve":
19            loan_deposit(login_Details,loanPayment,loanAmount,date) #C
20            break
21
22        elif status == "Reject":
23            print(
24                "*=====*\n"
25                "|| The Payment has been rejected ||\n"
26                "*=====*\n"
27            )
28
29        else:
30            print(
31                "*=====*\n"
32                "|| Incorrect input, try again ||\n"
33                "*=====*\n"
34            )
35
36
37    elif choiceNumber == '3':
38        while True:
39            try:
40                loanAmount = float(input("=<< Enter loan amount; "))
41                terms = float(input("=<< Enter loan terms in years; "))
42                break
43            except ValueError:
44                print("=<< Please Enter A Valid Amount =>>")
45        date = input("=<< Please Enter The Date in This Format dd/mm/yyyy; ")
46        while "/" not in date:
47            date = input("=<< Please Enter A A Valid Date in This Format dd/mm/yyyy; ")
48        years = float(terms * 12)
49        interestRate = float(2 / 100 / 12)
50        loanPayment = loanAmount * (interestRate * (1 + interestRate) ** years) / (
51            (1 + interestRate) ** years - 1)
52        print(
53            "*=====*\n"
54            f"|| The monthly payment is {loanPayment:.2f} RM ||"
55            "*=====*\n"
56        )
57
58        status_loop = True
59        while status_loop:
60            status = input("=<< Approve Or Reject Loan Status; ")
61            if status == "Approve":
62                loan_deposit(login_Details,loanPayment,loanAmount,date) #C
63                break
64
65            elif status == "Reject":
66                print(
67                    "*=====*\n"
68                    "|| The Payment has been rejected ||\n"
69                    "*=====*\n"
70                )
71
72            else:
73                print(
74                    "*=====*\n"
75                    "|| Incorrect input, try again ||\n"
76                    "*=====*\n"
77                )
78
```

```
BS / DP / Desktop / PyT / MOHAMED_KHAIRY_MOHAMED_ADDRESSBOOK_BANK_SYSTEM / FOOD100 / CODE / MOHAMED_KHAIRY  
    "*****\n    )  
  
    else:  
        print(  
            "*****\n            | Incorrect input, try again |\n            "*****\n        )  
  
    )  
  
elif choiceNumber == '4':  
    while True:  
        try:  
            loanAmount = float(input("=<< Enter loan amount; "))  
            terms = float(input("=<< Enter loan terms in years; "))  
            break  
        except ValueError:  
            print("=<< Please Enter A Valid Amount =>>")  
    date = input("=<< Please Enter The Date in This Format dd/mm/yyyy; ")  
    while "/" not in date:  
        date = input("=<< Please Enter A A Valid Date in This Format dd/mm/yyyy; ")  
    years = float(terms * 12)  
    interestRate = float(8 / 100 / 12)  
    loanPayment = round(loanAmount * (interestRate * (1 + interestRate) ** years) / (  
        (1 + interestRate) ** years - 1))  
    print(  
        "*****\n        f" | The monthly payment is {loanPayment:.2f} RM |\n        "*****\n    )  
    status_loop = True  
    while status_loop:  
        while status_loop:  
            status = input("=<< Approve Or Reject Loan Status; ")  
            if status == "Approve":  
                loan_deposit(login_Details,loanPayment,loanAmount,date)  
                break  
  
            elif status == "Reject":  
                print(  
                    "*****\n                    | The Payment has been rejected |\n                    "*****\n                )  
  
            else:  
                print(  
                    "*****\n                    | Incorrect input, try again |\n                    "*****\n                )  
  
    elif choiceNumber == '5':  
        main_menu()  
  
    else:  
        print(  
            "*****\n            | Invalid option |\n            | Choose from 1-5 |\n            "*****\n        )  
    Current_Loan_Menu()
```

28 ISLAMIC LOAN MENU:

This The Flowchart of This Function:



This The Pseudo Code of This Function:

```

#A Function That Display a Menu For The Loan OF The Islamic Account
DEFINE Islamic_Loan_Menu(login_Details) THEN
    DISPLAY(
        ======\n
        | -- Enter Loan Type -- |\n
        ======\n
        | << 1. Education Loan (Interest Rate; 0%) >>= |\n
        | << 2. Car Loan (Interest Rate; 0%) >>= |\n
        | << 3. Home Loan (Interest Rate; 0%) >>= |\n
        | << 4. Personal Loan (Interest Rate; 0%) >>= |\n
        | << 5. Back to Menu >>= |\n
        ======\n
    )

    SET choiceNumber TO GET("=<< Choose loan type; ")

    IF choiceNumber == "1" THEN
        DOWHILE True THEN
            TRY THEN
                SET loanAmount TO FLOAT(GET("=<< Enter loan amount; "))
                SET terms TO FLOAT(GET("=<< Enter loan terms IN years; "))
                BREAK
            EXCEPT ValueError THEN
                DISPLAY("=<< Please Enter A Valid Amount =>>")
            SET date TO GET("=<< Please Enter The Date IN This Format dd/mm/yyyy; ")
        DOWHILE "/" not IN date THEN
            SET date TO GET("=<< Please Enter A A Valid Date IN This Format dd/mm/yyyy; ")
        SET years TO FLOAT(terms * 12)
        SET loanPayment TO FLOAT(loanAmount / 12)
        DISPLAY(
            ======\n
            f| The monthly payment is {loanPayment THEN .2f} RM |\n
            ======\n
        )
        SET status_loop TO True
        DOWHILE status_loop THEN
            SET status TO GET("=<< Approve Or Reject Loan Status; ")
            IF status == "Approve" THEN
                CALL loan_deposit(login_Details,loanPayment,loanAmount,date)
                BREAK
            ELSEIF status == "Reject" THEN
                DISPLAY(
                    ======\n
                    | The Payment has been rejected |\n
                    ======\n
                )
            ELSE THEN
                DISPLAY(
                    ======\n
                    | Incorrect GET, try again |\n
                    ======\n
                )
            ENDIF
        DOWHILE status == "Approve" OR status == "Reject" THEN
            SET status TO GET("=<< Approve Or Reject Loan Status; ")
        ENDWHILE
    ELSEIF choiceNumber == '2' THEN
        DOWHILE True THEN
            TRY THEN
                SET loanAmount TO FLOAT(GET("=<< Enter loan amount; "))
                SET terms TO FLOAT(GET("=<< Enter loan terms IN years; "))
                BREAK
            EXCEPT ValueError THEN
                DISPLAY("=<< Please Enter A Valid Amount =>>")
            SET date TO GET("=<< Please Enter The Date IN This Format dd/mm/yyyy; ")
        DOWHILE "/" not IN date THEN
            SET date TO GET("=<< Please Enter A A Valid Date IN This Format dd/mm/yyyy; ")
        SET years TO FLOAT(terms * 12)
        SET loanPayment TO FLOAT(loanAmount / 12)
    ENDIF
)

```

```

        )

ELSE THEN
    DISPLAY(
        "=====*\n"
        "| Incorrect GET, try again |\n"
        "=====*\n"
    )

ELSEIF choiceNumber == '4' THEN
    DOWHILE True THEN
        TRY THEN
            SET loanAmount TO FLOAT(GET("=<< Enter loan amount; "))
            SET terms TO FLOAT(GET("=<< Enter loan terms IN years; "))
            BREAK
        EXCEPT ValueError THEN
            DISPLAY("=<< Please Enter A Valid Amount =>>")
        SET date TO GET("=<< Please Enter The Date IN This Format dd/mm/yyyy; ")
        DOWHILE "/" not IN date THEN
            SET date TO GET("=<< Please Enter A A Valid Date IN This Format dd/mm/yyyy; ")
        SET years TO FLOAT(terms * 12)
        SET loanPayment TO FLOAT(loanAmount / 12)
        DISPLAY(
            "=====*\n"
            f"! The monthly payment is {loanPayment THEN .2f} RM |\n"
            "=====*\n"
        )
    )

    SET status_loop TO True

    DOWHILE status_loop THEN
        SET status TO GET("=<< Approve Or Reject Loan Status; ")
        IF status == "Approve" THEN
            CALL loan_deposit(login_Details,loanPayment,loanAmount,date)
            BREAK
        ELSEIF status == "Reject" THEN
            DISPLAY(
                "=====*\n"
                "| The Payment has been rejected |\n"
                "=====*\n"
            )
        ELSE THEN
            DISPLAY(
                "=====*\n"
                "| Incorrect GET, try again |\n"
                "=====*\n"
            )
        ENDIF
    ENDWHILE
ENDDO
ENDDEFINE

```

And This is The Source of This Function:

```
#A Fuction That Display a Menu For The Loan OF The Islamic Account
def Islamic_Loan_Menu(login_Details):
    print(
        "*=====*\n"
        "| -- Enter Loan Type -- |\n"
        "*=====*\n"
        "| << 1. Education Loan (Interest Rate; 0%) >> |\n"
        "| << 2. Car Loan (Interest Rate; 0%) >> |\n"
        "| << 3. Home Loan (Interest Rate; 0%) >> |\n"
        "| << 4. Personal Loan (Interest Rate; 0%) >> |\n"
        "| << 5. Back to Menu >> |\n"
        "*=====*\n"
    )

    choiceNumber = input("=<< Choose loan type; ")

    if choiceNumber == "1":
        while True:
            try:
                loanAmount = float(input("=<< Enter loan amount; "))
                terms = float(input("=<< Enter loan terms in years; "))
                break
            except ValueError:
                print("=<< Please Enter A Valid Amount =>>")
            date = input("=<< Please Enter The Date in This Format dd/mm/yyyy; ")
            while "/" not in date:
                date = input("=<< Please Enter A A Valid Date in This Format dd/mm/yyyy; ")
            years = float(terms * 12)
            loanPayment = float(loanAmount / 12)
            print(
                "*=====*\n"
                f"| The monthly payment is {loanPayment:.2f} RM |\n"
                "*=====*\n"
            )
            status_loop = True
            while status_loop:
                status = input("=<< Approve Or Reject Loan Status; ")
                if status == "Approve":
                    loan_deposit(login_Details,loanPayment,loanAmount,date) #C
                    break

                elif status == "Reject":
                    print(
                        "*=====*\n"
                        "| The Payment has been rejected |\n"
                        "*=====*\n"
                    )

                else:
                    print(
                        "*=====*\n"
                        "| Incorrect input, try again |\n"
                        "*=====*\n"
                    )

    elif choiceNumber == '2':
        while True:
            try:
                loanAmount = float(input("=<< Enter loan amount; "))
                terms = float(input("=<< Enter loan terms in years; "))
                break
            except ValueError:
                print("=<< Please Enter A Valid Amount =>>")
            date = input("=<< Please Enter The Date in This Format dd/mm/yyyy; ")
            while "/" not in date:
                date = input("=<< Please Enter A A Valid Date in This Format dd/mm/yyyy; ")
            years = float(terms * 12)
            loanPayment = float(loanAmount / 12)
```

```
        "| The Payment has been rejected |\n"
        "*=====\n"
    )

else:
    print(
        "*=====\n"
        "| Incorrect input, try again |\n"
        "*=====\n"
    )



elif choiceNumber == '3':
    while True:
        try:
            loanAmount = float(input("=<< Enter loan amount; "))
            terms = float(input("=<< Enter loan terms in years; "))
            break
        except ValueError:
            print("=<< Please Enter A Valid Amount =>>")
    date = input("=<< Please Enter The Date in This Format dd/mm/yyyy; ")
    while "/" not in date:
        date = input("=<< Please Enter A A Valid Date in This Format dd/mm/yyyy; ")
    years = float(terms * 12)
    loanPayment = float(loanAmount / 12)
    print(
        "*=====\n"
        f"!| The monthly payment is {loanPayment:.2f} RM |\n"
        "*=====\n"
    )

status_loop = True

while status_loop:
    status = input("=<< Approve Or Reject Loan Status; ")
    if status == "Approve":
        loan_deposit(login_Details,loanPayment,loanAmount,date) #C
        break

    elif status == "Reject":
        print(
            "*=====\n"
            "| The Payment has been rejected |\n"
            "*=====\n"
        )

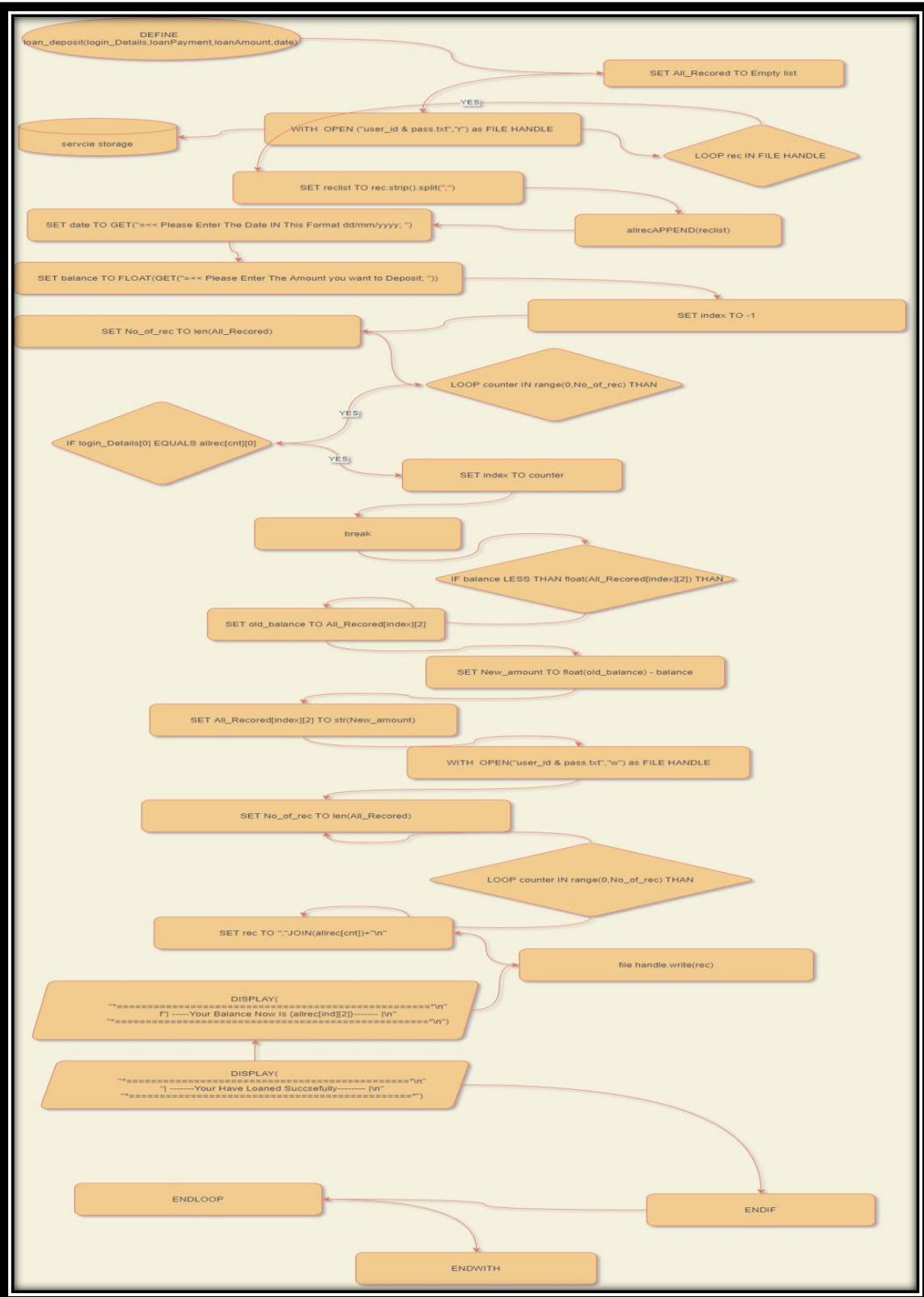
    else:
        print(
            "*=====\n"
            "| Incorrect input, try again |\n"
            "*=====\n"
        )



elif choiceNumber == '4':
    while True:
        try:
            loanAmount = float(input("<<< Enter loan amount; "))
            terms = float(input("=<< Enter loan terms in years; "))
            break
        except ValueError:
            print("=<< Please Enter A Valid Amount =>>")
    date = input("=<< Please Enter The Date in This Format dd/mm/yyyy; ")
    while "/" not in date:
        date = input("=<< Please Enter A A Valid Date in This Format dd/mm/yyyy; ")
    years = float(terms * 12)
    loanPayment = float(loanAmount / 12)
    print(
        "*=====\n"
        f"!| The monthly payment is {loanPayment:.2f} RM |\n"
        "*=====\n"
    )
```

29 LOAN DEPOSIT:

This The Flowchart of This Function:



This The Pseudo Code of This Function:

```
#A Function That Deposit The Loan Amount Into The Customer Account
DEFINE loan_deposit(login_Details,loanPayment,loanAmount,date) THEN
    SET allrec TO [] # TO All Recorded
    WITH OPEN ("user_id & pass.txt","r") as FILE HANDLE THEN
        SET rec IN FILE HANDLE THEN #Rec TO Recorded
            SET reclist TO rec.strip().split(";")
            allrecAPPEND(reclist)

        SET ind TO -1 #ind TO index
        SET nor TO LENGTH(allrec) #nor TO Number of The Recorded
        SET for cnt IN RANGE(0,nor) THEN #cnt TO Counter
            IF login_Details[0] == allrec[cnt][0] THEN
                SET ind TO cnt
                BREAK

            SET old_balance TO allrec[ind][2]
            SET New_amount TO FLOAT(old_balance) + FLOAT(loanAmount)
            SET allrec[ind][2] TO STRING(New_amount)
            WITH OPEN("user_id & pass.txt","w") as FILE HANDLE THEN
                SET nor TO LENGTH(allrec)
                LOOP cnt IN RANGE(0,nor) THEN
                    SET rec TO ";"JOIN(allrec[cnt])+"\n"
                    FILE HANDLE WRITE(rec)
                    DISPLAY(
                        "=====\n"
                        "| -----Your Have Loaned Succesfully----- |\n"
                        "=====\n"
                    )
                    DISPLAY(
                        "=====\n"
                        f" | -----Your Balance Now Is {allrec[ind][2]}----- |\n"
                        "=====\n"
                    )
                CALL loan_deposit_pay(loanPayment,login_Details,date,loanAmount)

            ENDLOOP
            ENDWITH
            ENDIF
        ENDDEFINE
```

And This is The Source of This Function:

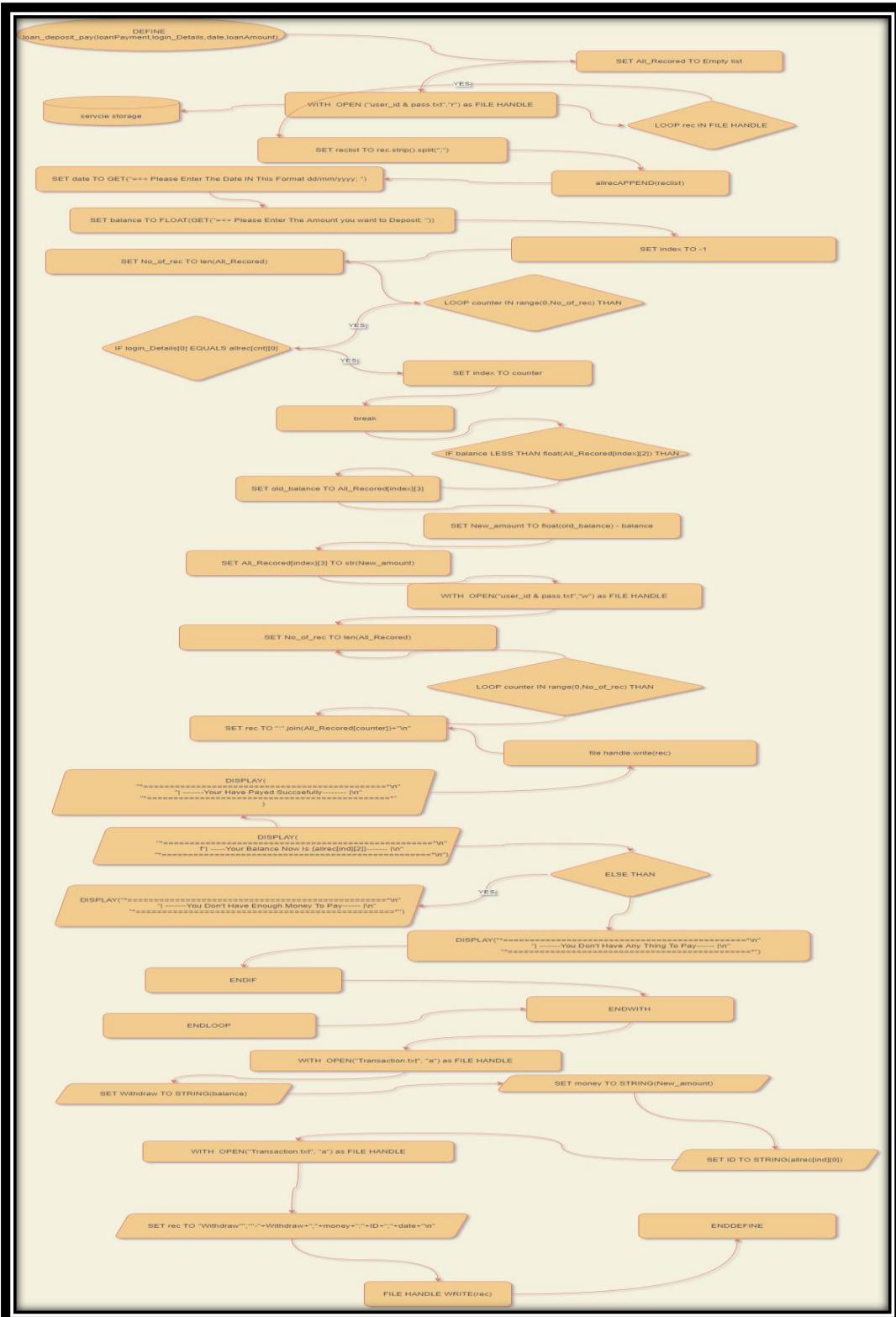
```
#A Fuction That Deposit The Loan Amount Into The Custoumer Account
def loan_deposit(login_Details,loanPayment,loanAmount,date):
    allrec = [] # = All Recored
    with open ("user_id & pass.txt","r") as fh:
        for rec in fh: #Rec = Recored
            reclist = rec.strip().split(";")
            allrec.append(reclist)

    ind = -1 #ind = index
    nor = len(allrec) #nor = Number of The Recoreds
    for cnt in range(0,nor): #cnt = Counter
        if login_Details[0] == allrec[cnt][0]:
            ind = cnt
            break

    old_balance = allrec[ind][2]
    New_amount = float(old_balance) + float(loanAmount)
    allrec[ind][2] = str(New_amount)
    with open("user_id & pass.txt","w") as fh:
        nor = len(allrec)
        for cnt in range(0,nor):
            rec = ";" .join(allrec[cnt])+"\n"
            fh.write(rec)
        print(
        "*=====\n"
        "| -----Your Have Loained Succsefully----- |\n"
        "*=====*\n"
    )
    print(
    "*=====\n"
    f" | -----Your Balance Now Is {allrec[ind][2]}----- |\n"
    "*=====*\n"
)
    loan_deposit_pay(loanPayment,login_Details,date,loanAmount) #C
```

30 LOAN DEPOSIT PAY:

This The Flowchart of This Function:



This The Pseudo Code of This Function:

```
#A Function That Saves The Monthly Loan ON The Custoers That He Need To Pay
DEFINE loan_deposit_pay(loanPayment,login_Details,date,loanAmount) THEN
    SET allrec TO [] # TO All Recorded
    WITH OPEN ("user_id & pass.txt","r") as FILE HANDLE THEN
        SET for rec IN FILE HANDLE THEN #Rec TO Recorded
            SET reclist TO rec.strip().split(";");
            allrecAPPEND(reclist)

        SET ind TO -1 #ind TO index
        SET nor TO LENGTH(allrec) #nor TO Number of The Recorded
        SET for cnt IN RANGE(0,nor) THEN #cnt TO Counter
            IF login_Details[0] == allrec[cnt][0] THEN
                SET ind TO cnt
                BREAK

            SET New_amount TO loanPayment
            SET allrec[ind][3] TO STRING(New_amount)
            WITH OPEN("user_id & pass.txt","w") as FILE HANDLE THEN
                SET nor TO LENGTH(allrec)
                LOOP cnt IN RANGE(0,nor) THEN
                    SET rec TO ";"JOIN(allrec[cnt])+"\n"
                    FILE HANDLE WRITE(rec)
                DISPLAY(
                    "-----\n"
                    f" | -----You Need To Pay; {allrec[ind][3]} By The Next Month----- |\n"
                    "-----\n")
                WITH OPEN("Transaction.txt", "a") as FILE HANDLE THEN
                    SET Deposite TO STRING(loanAmount)
                    SET money TO STRING(New_amount)
                    SET ID TO STRING(allrec[ind][0])
                    WITH OPEN("Transaction.txt", "a") as FILE HANDLE THEN
                        SET rec TO "Loan";"+Deposite+";"+money+";"+ID+";"+date+"\n"
                        FILE HANDLE WRITE(rec)

            ENDLOOP
        ENDIF
    ENDDFINE
```

And This is The Source of This Function:

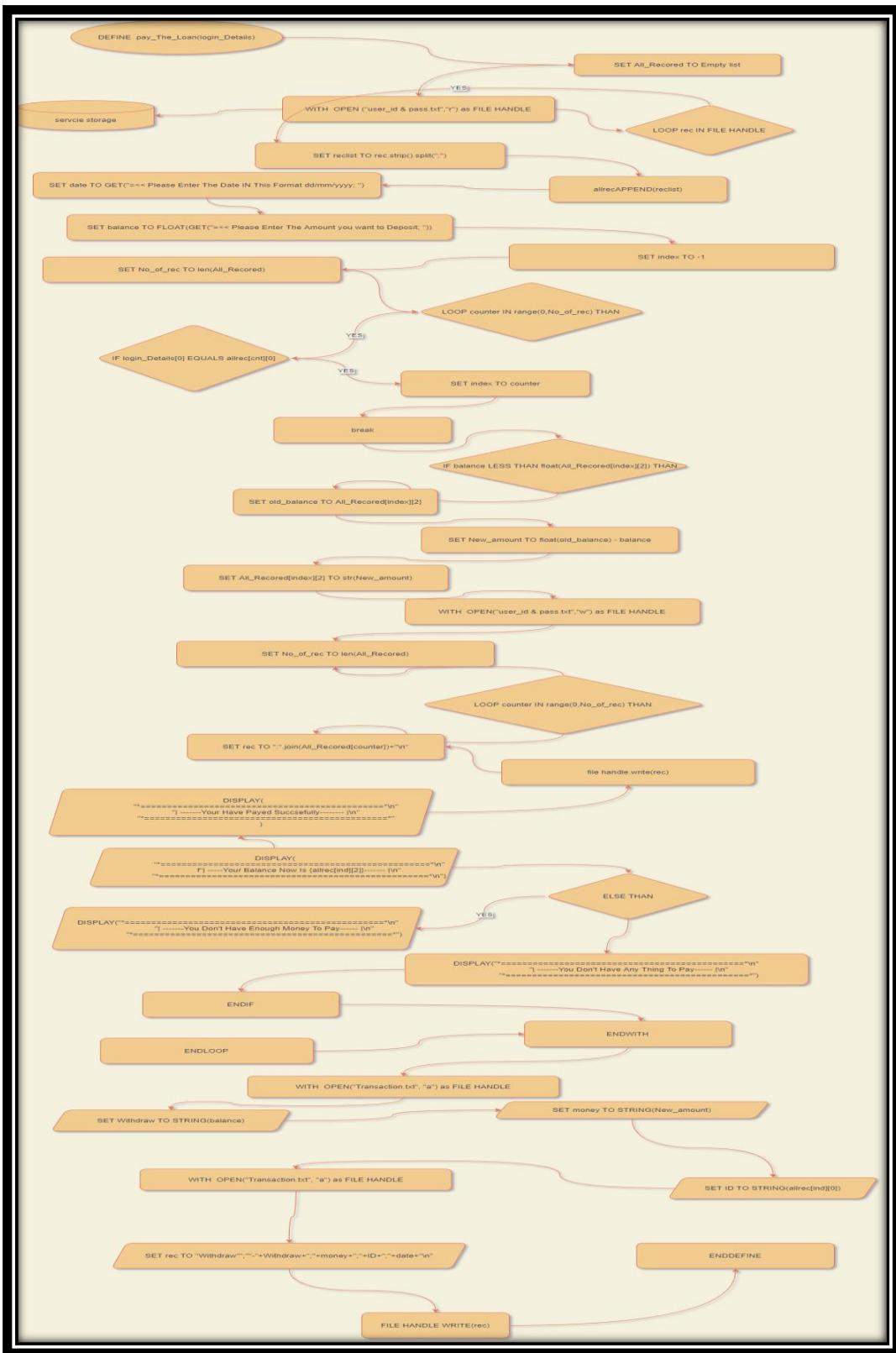
```
#A Fuction That Saves The Monthly Loan ON The Custoers That He Need To Pay
def loan_deposit_pay(loanPayment,login_Details,date,loanAmount):
    allrec = [] # = All Recored
    with open ("user_id & pass.txt","r") as fh:
        for rec in fh:#Rec = Recored
            reclist = rec.strip().split(";")
            allrec.append(reclist)

    ind = -1 #ind = index
    nor = len(allrec) #nor = Number of The Recoreds
    for cnt in range(0,nor): #cnt = Counter
        if login_Details[0] == allrec[cnt][0]:
            ind = cnt
            break

    New_amount = loanPayment
    allrec[ind][3] = str(New_amount)
    with open("user_id & pass.txt","w") as fh:
        nor = len(allrec)
        for cnt in range(0,nor):
            rec = ";" .join(allrec[cnt])+"\n"
            fh.write(rec)
        print(
        "=====| -----You Need To Pay; {allrec[ind][3]} By The Next Month----- |\\n"
        "=====|-----\\n")
        with open("Transaction.txt", "a") as fh:
            Deposite = str(loanAmount)
            money = str(New_amount)
            ID = str(allrec[ind][0])
            with open("Transaction.txt", "a") as fh:
                rec = "Loan";"+Deposite+";"+money+";"+ID+";"+date+"\n"
                fh.write(rec)
```

31 PAY THE LOAN:

This The Flowchart of This Function:



This The Pseudo Code of This Function:

```

#A Function That Make The Customer Pay The Monthly Loan On Him
DEFINE pay_The_Loan(login_Details) THEN
    SET date TO GET("=<< Please Enter The Date IN This Format dd/mm/yyyy; ")
    DOWHILE "/" not IN date THEN
        SET date TO GET("=<< Please Enter A A Valid Date IN This Format dd/mm/yyyy; ")
    SET allrec TO [] # TO All Recorded
    WITH OPEN ("user_id & pass.txt","r") as FILE HANDLE THEN
        SET for rec IN FILE HANDLE THEN $Rec TO Recored
            SET reclist TO rec.strip().split(":")
            allrecAPPEND(reclist)

        SET ind TO -1 #find TO index
        SET nor TO LENGTH(allrec) #nor TO Number of The Recoreds
        SET for cnt IN RANGE(0,nor) THEN #cnt TO Counter
            IF login_Details[0] == allrec[cnt][0] THEN
                SET ind TO cnt
                BREAK
            IF STRING(allrec[ind][2]) != "-" THEN
                IF FLOAT(allrec[ind][2]) >= FLOAT(allrec[ind][3]) THEN
                    SET old_balance TO allrec[ind][2]
                    SET New_amount TO FLOAT(old_balance) - FLOAT(allrec[ind][3])
                    SET allrec[ind][2] TO STRING(New_amount)
                    WITH OPEN("user_id & pass.txt","w") as FILE HANDLE THEN
                        SET nor TO LENGTH(allrec)
                        LOOP cnt IN RANGE(0,nor) THEN
                            SET rec TO ";"JOIN(allrec[cnt])+"\n"
                            FILE HANDLE WRITE(rec)
                            DISPLAY(
                                "-----\n"
                                "| -----Your Have Payed Succsefully----- |\n"
                                "-----\n"
                            )
                        DISPLAY(
                            "-----\n"
                            "| -----Your Balance Now Is {allrec[ind][2]}----- |\n"
                            "-----\n"
                        )
                        WITH OPEN("Transaction.txt", "a") as FILE HANDLE THEN
                            SET Withdraw TO STRING(allrec[ind][3])
                            SET money TO STRING(New_amount)
                            SET ID TO STRING(allrec[ind][0])
                            WITH OPEN("Transaction.txt", "a") as FILE HANDLE THEN
                                SET rec TO "Loan Pay";"--"+Withdraw";"+money";"+ID";"+date+"\n"
                                FILE HANDLE WRITE(rec)
                            ENDWITH
                        ENDIF
                    ENDDO
                ENDDEFINE
            ELSE THEN
                DISPLAY("-----\n"
                    "| -----You Don't Have Enough Money To Pay----- |\n"
                    "-----\n")
            ELSE THEN
                DISPLAY("-----\n"
                    "| -----You Don't Have Any Thing To Pay----- |\n"
                    "-----\n")
            ENDIF
        ENDWITH
    ENDDEFINE

```

And This is The Source of This Function:

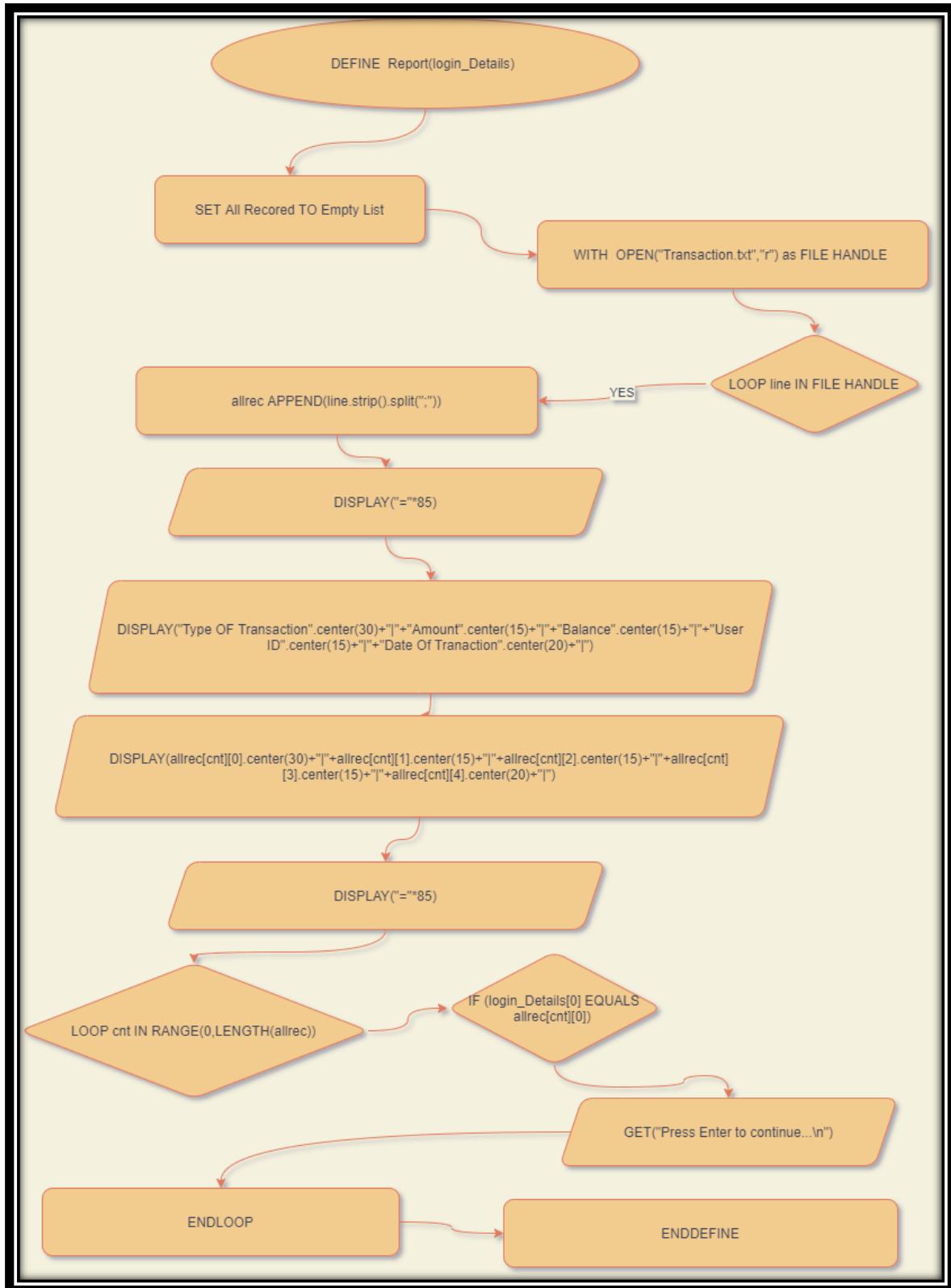
```
#A Fuction That Make The Customer Pay The Monthly Loan On Him
def pay_The_Loan(login_Details):
    date = input("=> Please Enter The Date in This Format dd/mm/yyyy; ")
    while "/" not in date:
        date = input("=> Please Enter A A Valid Date in This Format dd/mm/yyyy; ")
    allrec = [] # All Recored
    with open ("user_id & pass.txt","r") as fh:
        for rec in fh: #Rec = Recored
            recList = rec.strip().split(";")
            allrec.append(recList)

    ind = -1 #ind = index
    nor = len(allrec) #nor = Number of The Recoreds
    for cnt in range(0,nor): #cnt = Counter
        if login_Details[0] == allrec[cnt][0]:
            ind = cnt
            break
    if str(allrec[ind][2]) != "-":
        if float(allrec[ind][2]) >= float(allrec[ind][3]):
            old_balance = allrec[ind][2]
            New_amount = float(old_balance) - float(allrec[ind][3])
            allrec[ind][2] = str(New_amount)
            with open("user_id & pass.txt","w") as fh:
                nor = len(allrec)
                for cnt in range(0,nor):
                    rec = ";" .join(allrec[cnt]) + "\n"
                    fh.write(rec)
                print(
                    "*=====*\n"
                    "| -----Your Have Payed Succsefully----- |\n"
                    "*=====*"
                )
                print(
                    "*=====*\n"
                    f"|" -----Your Balance Now Is {allrec[ind][2]}----- |\n"
                    "*=====*\n"
                )
                with open("Transaction.txt", "a") as fh:
                    Withdraw = str(allrec[ind][3])
                    money = str(New_amount)
                    ID = str(allrec[ind][0])
                    with open("Transaction.txt", "a") as fh:
                        rec = "Loan Pay"; "-" + Withdraw + ";" + money + ";" + ID + ";" + date + "\n"
                        fh.write(rec)

            else:
                print("*=====*\n"
                      "| -----You Don't Have Enough Money To Pay----- |\n"
                      "*=====*")
        else:
            print("*=====*\n"
                  "| -----You Don't Have Any Thing To Pay----- |\n"
                  "*=====*")
```

32 REPORT:

This The Flowchart of This Function:



This The Pseudo Code of This Function:

```

#A Fuction That Displays For Customer His Transactions
DEFINE Report(login_Details) THEN
    SET allrec TO [] # TO All Recorded
    WITH OPEN("transaction.txt","r") as FILE HANDLE THEN
        LOOP line IN FILE HANDLE THEN
            allrecAPPEND(line.strip().split(";"))
    DISPLAY ("*85")
    DISPLAY ("Type OF Transaction".center(30)+"|"+"Amount".center(15)+"|"+"Balance".center(15)+"|"+"User ID".center(15)+"|"+"Date Of Transaction".center(20)+"|")
    DISPLAY ("*85")
    SET for cnt IN RANGE(0,LENGTH(allrec)) THEN   #cnt TO Counter
        IF (login_Details[0] == allrec[cnt][3]) THEN
            DISPLAY (allrec[cnt][0].center(30)+"|"+allrec[cnt][1].center(15)+"|"+allrec[cnt][2].center(15)+"|"+allrec[cnt][3].center(15)+"|"+allrec[cnt][4].center(20)+"|")
        GET("Press Enter to continue...")
    ENDIF
    ENDWITH
    ENDLOOP
ENDDDEFINE

```

And This is The Source of This Function:

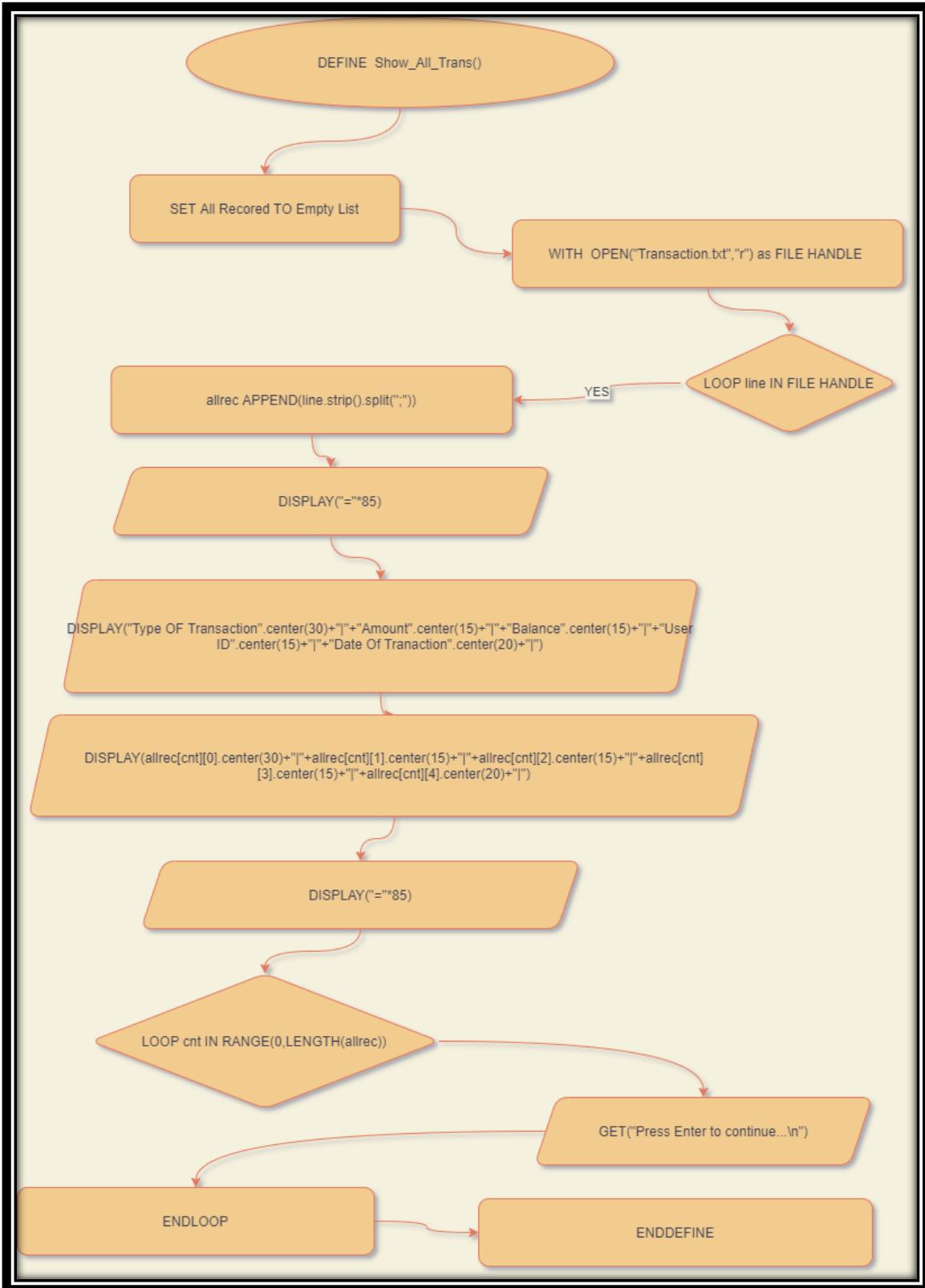
```

#A Fuction That Displays For Customer His Transactions
def Report(Login_Details):
    allrec = [] # = All Recorded
    with open("Transaction.txt", "r") as fh:
        for line in fh:
            allrec.append(line.strip().split(";"))
    print("*85")
    print("Type Of Transaction".center(30)+"|"+"Amount".center(15)+"|"+"Balance".center(15)+"|"+"User ID".center(15)+"|"+"Date Of Transaction".center(20)+"|")
    print("*85")
    for cnt in range(0,len(allrec)): #cnt = Counter
        if (login_Details[0] == allrec[cnt][3]):
            print(allrec[cnt][0].center(30)+"|"+allrec[cnt][1].center(15)+"|"+allrec[cnt][2].center(15)+"|"+allrec[cnt][3].center(15)+"|"+allrec[cnt][4].center(20)+"|")
    input("Press Enter to continue...")

```

33 SHOW ALL TRANS:

This The Flowchart of This Function:



This The Pseudo Code of This Function:

```

#A Fuction That Show All the transacrions of Customer
DEFINE Show_All_Trans() THEN
    WITH OPEN("Transaction.txt","r") as FILE HANDLE THEN
        DISPLAY("Type OF Transaction".center(30)+"|"+"Amount".center(15)+"|"+"Balance".center(15)+"|"+"User ID".center(15)+"|"+"Date Of Transaction".center(20)+"|")
        DISPLAY("=*85")
        SET for cnt IN FILE HANDLE THEN  #cnt TO Counter
            SET allrec TO cnt.strip().split(";")
            DISPLAY(allrec[cnt][0].center(30)+"|"+allrec[cnt][1].center(15)+"|"+allrec[cnt][2].center(15)+"|"+allrec[cnt][3].center(15)+"|"+allrec[cnt][4].center(20)+"|")
        GET("Press Enter to continue...")

    ENDWITH
ENDDEFINE

CALL main_menu()

END

```

And This is The Source of This Function:

```

#A Fuction That Show All the transacrions of Customer
def Show_All_Trans():
    with open("Transaction.txt","r") as fh:
        print("*85")
        print("Type OF Transaction".center(30)+"|"+"Amount".center(15)+"|"+"Balance".center(15)+"|"+"User ID".center(15)+"|"+"Date Of Transaction".center(20)+"|")
        print("*85")
        for cnt in fh: #cnt = Counter
            allrec = cnt.strip().split(";")
            print(allrec[cnt][0].center(30)+"|"+allrec[cnt][1].center(15)+"|"+allrec[cnt][2].center(15)+"|"+allrec[cnt][3].center(15)+"|"+allrec[cnt][4].center(20)+"|")
    input("Press Enter to continue...")

```

34 DATA VALIDATION

```

                     
email  = input("=<< Please Enter Your Email; ")
while "@" not in email or ".com" not in email:
    email = input("=<< Please Enter A Valid Email; ")

```

“not in” can check whether or not the “@” and “.com” gift within the variable email. It returns “True” price if the “@” and “.com” isn’t gift within the variable and asks the user to input the worth once more. If each of them is gift within the variable, the program won’t raise the user to input once more

```
try:  
    Amount_Diposit = float(input("=<< Please Enter Your Amount That You Want Deposit Minimum 500RM; "))  
except ValueError:  
    print("please Ennter A valid Amount")
```

I have Used try and except To Force the User to Enter Numbers Only
And Above of Thim While Loop To loop Until They Enter A valid input

I've searched about the isdigit() & istring() But I didn't understand them well, so I decided to use a method That am sure about it

I've Used float() instead of integer to avoid any error if the user has enter a decimal Number

```
with open('Fourm.txt', 'a') as f:  
    record = First_Name+";"+Last_Name+";"+str(Tele_No)+";"+city+";"+email+";"+str(Amount_Diposit)+";"+AccType+";"+str(age)+"\n"  
    f.write(record)
```

I've used str() To convert any Float or integer Value into string, so it doesn't give me error while saving it as a list in a file

I Didn't use any library because it's not allowed

So, I made the user to enter the date manually

```
date = input("=<< Please Enter The Date in This Format dd/mm/yyyy; ")  
while "/" not in date:  
    date = input("=<< Please Enter A A Valid Date in This Format dd/mm/yyyy; ")  
    year = float(date[-4:] * 10)
```

I've Forced the User To use / in the format of The Date

And I've given the way to write the date, but he is not forced to write the date in This Format

35 THESE ARE SOME SAMPLES OF THE OUT PUT AND INPUT

MAIN MENU:

```
*-----Welcome to Hamada's Bank Mangment-----*
*-----*
| =<< 1.          Open a new account      >>= |
| =<< 2.          login                  >>= |
| =<< 3.          Curnncesty Converter Calculatour >>= |
| =<< 4.          Exit/Quit              >>= |
*-----*
=<< Select Your Choice Number From The Above Menu; ■
```

OPEN ACCOUNT MENU:

```
=<< Select Your Choice Number From The Above Menu; 1
*-----*
| ----- Welcome to Opening Account Menu ----- |
*-----*
| =<< 1.          Islamic Account      >>= |
| =<< 2.          Current Account     >>= |
| =<< 3.          Saving Account      >>= |
| =<< 4.          Return to Main Menu   >>= |
*-----*
=<< Select Your Choice Number From The Above Menu;
```

ISLAMIC OPEN ACCOUNT:

```
1
=====
| -----Please Fill Up The Form----- |
=====

=<< Please Enter Your First Name; Muhammed
=<< Please Enter Your Last Name; Khairi
=<< Please Enter Your Telephone Number; 66653797
=<< Please Enter Your City; KL
=<< Please Enter Your Email; hamadakhairi09@gmail.com
=<< Please Enter Your Amount That You Want Deposit Minimum 500RM; 750
=<< Please Enter your age; 24
=====
| -----Thank You For Filling Up The Form We Will Contact you in your email within 2 Busniss Days----- |
=====
```

CURRENT OPEN ACCOUNT:

```
=<< Select Your Choice Number From The Above Menu;
2
=====
| -----Please Fill Up The Form----- |
=====

=<< Please Enter Your First Name; Ahmed
=<< Please Enter Your Last Name; Mahmoud
=<< Please Enter Your Telephone Number; 60426062
=<< Please Enter Your City; Kwd
=<< Please Enter Your Email; Ahmed@gmail.com
=<< Please Enter Your Amount That You Want Deposit Minimum 500RM; 100
=====
| -----For An Opening Account You Need Minimum 500RM----- |
=====
=<< Please Enter Your Amount That You Want Deposit Minimum 500RM; 300
=====
| -----For An Opening Account You Need Minimum 500RM----- |
=====
=<< Please Enter Your Amount That You Want Deposit Minimum 500RM; 1000
=<< Please Enter your age; 21
=====
| -----Thank You For Filling Up The Form We Will Contact you in your email within 2 Busniss Days----- |
=====
```

SAVING OPEN ACCOUNT:

```
=<< Select Your Choice Number From The Above Menu;
3
*=====
| -----Please Fill Up The Form----- |
*=====

=<< Please Enter Your First Name; Islam
=<< Please Enter Your Last Name; Omar
=<< Please Enter Your Telephone Number; 55332244
=<< Please Enter Your City; Egyp
=<< Please Enter Your Email; Islam250mar@ht.com
=<< Please Enter Your Amount That You Want Deposit Minimum 100RM; 90
*=====
| -----For An Opening Account You Need Minimum 100RM----- |
*=====

=<< Please Enter Your Amount That You Want Deposit Minimum 500RM; 100
=<< Please Enter your age; 29
*=====
| -----Thank You For Filling Up The Form We Will Contact you in your email within 2 Busniss Days----- |
*=====
```

CURRNCEY CONVERTER CALCULATOUR:

```
*=====
| -----Welcome to Hamada's Bank Mangment----- |
*=====

| =<< 1.          Open a new account      >>=
| =<< 2.          login                  >>=
| =<< 3.          Curnncey Converter Calculatour >>=
| =<< 4.          Exit/Quit              >>=
*=====

=<< Select Your Choice Number From The Above Menu; 3
*=====
| ----- Curnncey Converter Calculatour Menu ----- |
*=====

| =<< 1.          US Dollar            >>=
| =<< 2.          Kuwaiti dinar        >>=
| =<< 3.          Euro                 >>=
| =<< 4.          Indonesian Rupiah    >>=
| =<< 5.          chinese yuan        >>=
| =<< 6.          Return To Main Menu   >>=
| =<< 7.          Exit/Quit            >>=
*=====

=<< Select Your Choice Number From The Above Menu;
1
Please Enter The You wan't to convert From RM To USD; 50
The Amount is; 12.0 $
```

LOGIN:

```
*-----Welcome to Hamada's Bank Mangment----- |
*----- |
| =<< 1.          Open a new account      >>= |
| =<< 2.          login                  >>= |
| =<< 3.          Curnncey Converter Calculatour >>= |
| =<< 4.          Exit/Quit              >>= |
*----- |

=<< Select Your Choice Number From The Above Menu; 2

=<< Enter Your User Name; MuhammedSU
=<< Enter Your Password; 12345678
*----- |
| -- Login successfull.....-- |
*----- |

*----- |
| --- Welcome to Hamada's Bank: Muhammed ----- |
*----- |

*----- |
| ----- Welcome to Super User Menu ----- |
*----- |
| =<< 1.          Display All Pending Accounts    >>= |
| =<< 2.          Add Admin Account           >>= |
| =<< 3.          Add Current Customer Acount   >>= |
| =<< 4.          Add Islamic Customer Acount  >>= |
| =<< 5.          Add Saving Customer Acount  >>= |
| =<< 6.          Display All User Accounts    >>= |
| =<< 7.          Change The Passsword       >>= |
| =<< 8.          Change The User Name        >>= |
| =<< 9.          Show All The TransAction     >>= |
| =<< 10.         Return To Main Menu        >>= |
| =<< 11.         Exit/Quit                >>= |
*----- |

=<< Select Your Choice Number From The Above Menu;
```

ADD ADMIN:

```
=<< Select Your Choice Number From The Above Menu; 2
User ID; AU00001
User PassWord; AU00001
=<< Please Enter Your First Name; Usman
=<< Please Enter Your Last Name; Hashmi
=<< Please Enter Your Telephone Number; 89898989
=<< Please Enter Your City; Kl
=<< Please Enter Your Emai; Usman@apu.com
=<< Please Enter your age; 43
*=====
| -----The Admin Account Has Been Added Successfully----- |
*=====
```

ADMIN MENU:

```
=<< Enter Your User Name; AU00001
=<< Enter Your PassWord; AU00001
*=====
| -- Login successfull.....-- |
*=====

*=====
| --- Welcome to Hamada's Bank: Usman ----- |
*=====

*=====
| ----- Welcome to Admin User Menu ----- |
*=====

| =<< 1.      Add Current Customer Acount    >>= |
| =<< 2.      Add Islamic Customer Acount   >>= |
| =<< 3.      Display All Pending Accounts   >>= |
| =<< 4.      Change The Passsword          >>= |
| =<< 5.      Change The User Name          >>= |
| =<< 6.      Show All The TranAction       >>= |
| =<< 7.      Add Saving Customer Acount    >>= |
| =<< 8.      Return To Main Menu          >>= |
| =<< 9.      Exit/Quit                   >>= |
*=====

=<< Select Your Choice Number From The Above Menu;
```

ADD ISLAMIC CUSTOMER ACCOUNT:

```
=<< Select Your Choice Number From The Above Menu;  
2  
User ID; ICU00001  
User PassWord; ICU00001  
=<< Please Enter Your First Name; Diana  
=<< Please Enter Your Last Name; Khaled  
=<< Please Enter Your Telephone Number; 44527868  
=<< Please Enter Your City; Penang  
=<< Please Enter Your Emai; Diana@gmail.com  
=<< Please Enter Your Amount That You Want Deposit Minimum 500RM; 500  
=<< Please Enter your age; 26  
*-----*  
| -----The Islamic Account Has Been Added Successfully----- |  
*-----*
```

ADD SAVING ACCOUNT:

```
=<< Select Your Choice Number From The Above Menu;  
7  
User ID; SAV00001  
User PassWord; SAV00001  
=<< Please Enter Your First Name; Dazai  
=<< Please Enter Your Last Name; con  
=<< Please Enter Your Telephone Number; 85234679  
=<< Please Enter Your City; SAD  
=<< Please Enter Your Emai; Dazai_con@gmail.com  
=<< Please Enter Your Amount That You Want Deposit Minimum 100RM; 100  
=<< Please Enter your age; 25  
*-----*  
| -----The Saving Account Has Been Added Successfully----- |  
*-----*
```

ADD CURRENT CUSTOMER ACCOUNT:

```
=<< Select Your Choice Number From The Above Menu;
1
User ID; CCU00002
User PassWord; CCU00002
=<< Please Enter Your First Name; Mahmoud
=<< Please Enter Your Last Name; Mustafa
=<< Please Enter Your Telephone Number; 5456789
=<< Please Enter Your City; UAE
=<< Please Enter Your Email; Mahmoud344@gmail.com
=<< Please Enter Your Amount That You Want Deposit Minimum 500RM; 500
=<< Please Enter your age; 66
*=====
| -----The Current Account Has Been Added Successfully----- |
*=====
```

DISPLAY ALL USERS:

```
*=====
| --- Welcome to Hamada's Bank: Muhammed --- |
*=====

*=====
| ----- Welcome to Super User Menu ----- |
*=====
| =< 1. Display All Pending Accounts >>=
| =< 2. Add Admin Account >>=
| =< 3. Add Current Customer Account >>=
| =< 4. Add Islamic Customer Account >>=
| =< 5. Add Saving Customer Account >>=
| =< 6. Display All User Accounts >>=
| =< 7. Change The Password >>=
| =< 8. Change The User Name >>=
| =< 9. Show All The TransAction >>=
| =< 10. Return To Main Menu >>=
| =< 11. Exit/Quit >>=
*=====

=<< Select Your Choice Number From The Above Menu; 6
=====

| Usr ID | User Password | Balance | Loan | First Name | Last Name | Tele No | City | Email | Account Type | Age |
| MuhammedSU| 12345678 | - | - | Muhammed | Khairi | 60008035 | KW | Muhammed@gmail.com | SU | 26 |
| AU00005 | AU00005 | - | - | Hamada | Khairi | 66653797 | KL | hamada@gmail.com | AU | 23 |
| CCU00005 | CCU00002 | 9915.0 | 85 | Ahmed | Mahmoud | 60426062 | KW | Mh@gmail.com | CCU | 29 |
| CCU00005 | Dazai99 | 19329.0 | 171 | Abdelrahman | Dazai | 55555555 | KL | Dazai@gmail.com | CCU | 23 |
| AU00001 | AU00001 | - | - | Usman | Hashmi | 89898989.0 | K1 | Usman@apu.com | AU | 43.0 |
| ICU00001 | ICU00001 | 500.0 | - | Diana | Khaled | 44527868.0 | Penang | Diana@gmail.com | ICU | 26.0 |
| SAV00001 | SAV00001 | 100.0 | - | Dazai | con | 85234679.0 | SAD | Dazai_con@gmail.com | SAV | 25.0 |
| CCU00002 | CCU00002 | 500.0 | - | Mahmoud | Mustafa | 5456789.0 | UAE | Mahmoud344@gmail.com | CCU | 66.0 |

Press Enter to continue...
```

DISPLAY ALL PENDING:

```
=<< Select Your Choice Number From The Above Menu; 1
=====
| First Name | Last Name | Tele No | City | Email | Balance | Account Type | Age |
=====
| Abdelrahman | Dazai | 55555555 | KL | Dazai@.com | 1000 | CCU | 23 |
| Muhammed | Khairi | 66653797.0 | KL | hamadakhairi09@gmail.com | 750.0 | ICU | 24.0 |
| Ahmed | Mahmoud | 60426062.0 | Kwd | Ahmed@gmail.com | 1000.0 | CCU | 21.0 |
| Islam | Omar | 55332244.0 | Egyp | Islam250mar@ht.com | 100.0 | SAV | 29.0 |

Press Enter to continue...
```

CUREENT CUSTOMER MENU:

```
=<< Enter Your User Name; CCU00002
=<< Enter Your PassWord; CCU00002
*=====
| -- Login successfull.....-- |
*=====

*=====
| --- Welcome to Hamada's Bank: Mahmoud ----- |
*=====

*=====
| ----- Welcome to Customer User Menu ----- |
*=====

| =<< 1.           Withdrawing Money      >>= |
| =<< 2.           Depositing Money       >>= |
| =<< 3.           Display My Details     >>= |
| =<< 4.           loan Menu             >>= |
| =<< 5.           Change The Password    >>= |
| =<< 6.           Pay Monthly Loan       >>= |
| =<< 7.           Report Statement      >>= |
| =<< 8.           Return To Main Menu   >>= |
| =<< 9.           Exit/Quit            >>= |
*=====

=<< Select Your Choice Number From The Above Menu;
```

ISLAMIC CUSTOMER MENU:

```
=<< Enter Your User Name; ICU00001
=<< Enter Your Password; ICU00001
*=====
| -- Login successfull.....-- |
*=====

*=====
| --- Welcome to Hamada's Bank: Diana ----- |
*=====

*=====
| ----- Welcome to Islamic Customer User Menu ----- |
*=====

| =<< 1.           Withdrawing Money      >>= |
| =<< 2.           Depositing Money       >>= |
| =<< 3.           Display My Details     >>= |
| =<< 4.           Islamic loan Menu      >>= |
| =<< 5.           Change The Passsword   >>= |
| =<< 6.           Pay Monthly Loan       >>= |
| =<< 7.           Report Statement      >>= |
| =<< 8.           Return To Main Menu    >>= |
| =<< 9.           Exit/Quit             >>= |
*=====

=<< Select Your Choice Number From The Above Menu;
```

DISPLAY DETAILS:

```
*----- Welcome to Islamic Customer User Menu -----*
| ----- 1.      Withdrawing Money      >>= |
| ----- 2.      Depositing Money      >>= |
| ----- 3.      Display My Details    >>= |
| ----- 4.      Islamic loan Menu     >>= |
| ----- 5.      Change The Password    >>= |
| ----- 6.      Pay Monthly Loan      >>= |
| ----- 7.      Report Statement      >>= |
| ----- 8.      Return To Main Menu    >>= |
| ----- 9.      Exit/Quit           >>= |
*-----*

=<< Select Your Choice Number From The Above Menu;
3
*-----*
| Usre ID | User Password | Balance | Loan | First Name | Last Name | Tele No | City | Email | Account Type | Age |
*-----*
| ICU0001 | ICU0001 | 500.0 | - | Diana | Khaled | 44527868.0 | Penang | Diana@gmail.com | ICU | 26.0 |
Press Enter to continue...
```

SAVING ACCOUNT MENU:

```
=<< Enter Your User Name; SAV00001
=<< Enter Your PassWord; SAV00001
*=====
| -- Login successfull..... |
*=====

*=====
| --- Welcome to Hamada's Bank: Dazai ----- |
*=====

*=====
| ----- Welcome to Saving Customer User Menu ----- |
*=====

| =<< 1.          Depositing Money      >>= |
| =<< 2.          withdrawl Money      >>= |
| =<< 3.          Display My Details    >>= |
| =<< 4.          Change The Password    >>= |
| =<< 5.          Report Statement      >>= |
| =<< 6.          Return To Main Menu    >>= |
| =<< 7.          Exit/Quit           >>= |
*=====

=<< Select Your Choice Number From The Above Menu;
```

WITHDRAW:

```
=<< Select Your Choice Number From The Above Menu;  
2  
=<< Please Enter The Amount you want to Withdraw; 50  
=<< Please Enter The Date in This Format dd/mm/yyyy; 12/12/2021  
*=====*  
| -----Your Have withdrawn Succsefully----- |  
*=====*  
  
*=====*  
| -----Your Balance Now Is 50.0----- |  
*=====*
```

DEPOSIT:

```
=<< Select Your Choice Number From The Above Menu;  
1  
=<< Please Enter The Amount you want to Deposit; 500  
=<< Please Enter The Date in This Format dd/mm/yyyy; 13/12/2021  
*=====*  
| -----Your Have Diposit Succsefully----- |  
*=====*  
  
*=====*  
| -----Your Balance Now Is 550.0----- |  
*=====*
```

CHANGE PASSWORD:

```
=<< Select Your Choice Number From The Above Menu;  
4  
=<< Please Enter The new Password; No_Longer_Human  
*-----Your Password Have Been Changed Succsefully----- |  
*-----*
```

Change Username:

```
=<< Enter Your User Name; AU00001  
=<< Enter Your PassWord; AU00001  
*-----*  
| -- Login successfull..... |  
*-----*  
  
*-----*  
| --- Welcome to Hamada's Bank: Usman ----- |  
*-----*  
  
*-----*  
| ----- Welcome to Admin User Menu ----- |  
*-----*  
| =<< 1.      Add Current Customer Acount      >>= |  
| =<< 2.      Add Islamic Customer Acount     >>= |  
| =<< 3.      Display All Pending Accounts    >>= |  
| =<< 4.      Change The Passsword          >>= |  
| =<< 5.      Change The User Name           >>= |  
| =<< 6.      Show All The TranAction        >>= |  
| =<< 7.      Add Saving Customer Acount       >>= |  
| =<< 8.      Return To Main Menu            >>= |  
| =<< 9.      Exit/Quit                      >>= |  
*-----*  
  
=<< Select Your Choice Number From The Above Menu;  
5  
=<< Please Enter The New User Name; Usman  
*-----*  
| -----Your User Name Have Changed Succsefully----- |  
*-----*  
  
*-----*  
| ----- Welcome to Admin User Menu ----- |  
*-----*  
| =<< 1.      Add Current Customer Acount      >>= |  
| =<< 2.      Add Islamic Customer Acount     >>= |  
| =<< 3.      Display All Pending Accounts    >>= |  
| =<< 4.      Change The Passsword          >>= |  
| =<< 5.      Change The User Name           >>= |  
| =<< 6.      Show All The TranAction        >>= |  
| =<< 7.      Add Saving Customer Acount       >>= |  
| =<< 8.      Return To Main Menu            >>= |  
| =<< 9.      Exit/Quit                      >>= |  
*-----*  
  
=<< Select Your Choice Number From The Above Menu;
```

Current Loan:

```
*=====
| --- Welcome to Hamada's Bank: Mahmoud   |
*=====

*=====
| ----- Welcome to Customer User Menu ----- |
*=====

| =<< 1.          Withdrawing Money      >>=
| =<< 2.          Depositing Money       >>=
| =<< 3.          Display My Details    >>=
| =<< 4.          loan Menu           >>=
| =<< 5.          Change The Password  >>=
| =<< 6.          Pay Monthly Loan     >>=
| =<< 7.          Report Statement     >>=
| =<< 8.          Return To Main Menu >>=
| =<< 9.          Exit/Quit           >>=
*=====

=<< Select Your Choice Number From The Above Menu;
4
*=====
| --          Enter Loan Type        -- |
*=====

| =<< 1. Education Loan (Interest Rate; 1%) >>=
| =<< 2.     Car Loan (Interest Rate; 6%)    >>=
| =<< 3.     Home Loan (Interest Rate; 2%)    >>=
| =<< 4. Personal Loan (Interest Rate; 8%)   >>=
| =<< 5.          Back to Menu         >>=
*=====

=<< Choose loan type; 1
=<< Enter loan amount; 50000
=<< Enter loan terms in years; 5
=<< Please Enter The Date in This Format dd/mm/yyyy; 12/12/2021
*=====
| The monthly payment is 855.00 RM |
*=====

=<< Approve Or Reject Loan Status; Approve
*=====
| -----Your Have Loaned Succsefully----- |
*=====

| -----Your Balance Now Is 50500.0----- |
*=====

*=====
| -----You Need To Pay; 855 By The Next Month----- |
*=====
```

Pay The Loan:

```
*----- Welcome to Customer User Menu ----- |
*-----*
=<< 1.          Withdrawing Money      >>=
=<< 2.          Depositing Money       >>=
=<< 3.          Display My Details    >>=
=<< 4.          loan Menu           >>=
=<< 5.          Change The Password   >>=
=<< 6.          Pay Monthly Loan     >>=
=<< 7.          Report Statement      >>=
=<< 8.          Return To Main Menu   >>=
=<< 9.          Exit/Quit            >>=
*-----*

=<< Select Your Choice Number From The Above Menu;
6
=<< Please Enter The Date in This Format dd/mm/yyyy; 12/1/2022
*-----*
| -----Your Have Payed Succsefully----- |
*-----*
*-----*
| -----Your Balance Now Is 49645.0----- |
*-----*
```

Report:

Type OF Transaction	Amount	Balance	User ID	Date Of Tranaction
Loan	+50000.0	855	CCU00002	12/12/2021
Loan Pay	-855	49645.0	CCU00002	12/1/2022

Press Enter to continue...

Islamic Loan:

```
*=====
| --- Welcome to Hamada's Bank: Diana | |
*=====

*=====
| ----- Welcome to Islamic Customer User Menu ----- | |
*=====

| =<< 1.           Withdrawing Money      >>= |
| =<< 2.           Depositing Money       >>= |
| =<< 3.           Display My Details    >>= |
| =<< 4.           Islamic loan Menu     >>= |
| =<< 5.           Change The Passsword   >>= |
| =<< 6.           Pay Monthly Loan      >>= |
| =<< 7.           Report Statement      >>= |
| =<< 8.           Return To Main Menu    >>= |
| =<< 9.           Exit/Quit            >>= |
*=====

=<< Select Your Choice Number From The Above Menu;
4
*=====
| --          Enter Loan Type        -- | |
*=====

| =<< 1. Education Loan (Interest Rate; 0%) >>= |
| =<< 2.   Car Loan (Interest Rate; 0%)   >>= |
| =<< 3.   Home Loan (Interest Rate; 0%)  >>= |
| =<< 4. Personal Loan (Interest Rate; 0%) >>= |
| =<< 5.           Back to Menu         >>= |
*=====

=<< Choose loan type; 1
=<< Enter loan amount; 50000
=<< Enter loan terms in years; 5
=<< Please Enter The Date in This Format dd/mm/yyyy; 12/12/2021
*=====
| The monthly payment is 4166.67 RM | |
*=====

=<< Approve Or Reject Loan Status; Approve
*=====
| -----Your Have Loanded Succsefully----- | |
*=====

*=====
| -----Your Balance Now Is 50500.0----- | |
*=====

*=====
| -----You Need To Pay; 4166.666666666667 By The Next Month----- | |
*=====
```

36 FUNCTIONS TABLE:

Function Name	Screenshot	Explanation
<u>GENERATE ID</u>	<code>def genid(perm):</code>	This code creates a special identifier for each customer or employee in the bank
<u>MAIN MENU</u>	<code>def main_menu():</code>	This may be the first thing that the customer faces, as the customer decides whether he wants to open a new account or log in
<u>OPEN ACCOUNT MENU</u>	<code>def OPenAccMenu():</code>	This function makes a request to open a new account
<u>ISLAMIC OPEN ACCOUNT</u>	<code>def IOPenAcc():</code>	function that open Islamic account
<u>CURRENT OPEN ACCOUNT</u>	<code>def COpenAcc():</code>	Submit a work request for a user account, a regular account
<u>SAVING OPEN ACCOUNT</u>	<code>def SaVOpenAcc():</code>	Submit a work request for a user account, a Saving account
<u>LOGIN</u>	<code>def Login():</code>	Login list for customers or employees
<u>SPUER USER MENU</u>	<code>def Spuer_User_Menu(login_Details):</code>	Superuser menu that allows him to control the bank system

CUREENT CUSTOMER MENU	<code>def Cureent_Customer_Menu(login_Details):</code>	The normal user menu where he has limited options
SAVING ACCOUNT MENU	<code>def Sa_aCC_Menu(login_Details):</code>	The savings user list is not much different from the normal user list.
ISLAMIC CUSTOMER MENU	<code>def Islamic_Customer_Menu(login_Details):</code>	a function that displays Islamic customer menu
ADMIN MENU	<code>def Admin_Menu(login_Details):</code>	The admin menu as it has great options, but it remains less than the options of the superuser
ADD ISLAMIC CUSTOMER ACCOUNT	<code>def Add_ICU_ACC():</code>	a function that add Islamic customer account
DISPLAY ALL PENDING	<code>def Display_All_Pending():</code>	This menu displays account opening requests.
DISPLAY ALL USERS	<code>def Display_All_US():</code>	This list shows all the accounts registered within the bank
ADD ADMIN	<code>def AddAdmin():</code>	From here, the superuser can add an admin
ADD CURRENT CUSTOMER ACCOUNT	<code>def Add_CCU_ACC():</code>	a function that add current customer account
ADD SAVING ACCOUNT	<code>def Add_Sa_aCC():</code>	a function that add a saving customer account
WITHDRAW	<code>def Withdraw(login_Details):</code>	a function that makes the customer make withdraw transaction

<u>DEPOSIT</u>	<pre>def Deposit(login_Details):</pre>	a function that make the customer make a deposit transaction
<u>DISPLAY DETAILS</u>	<pre>def Display_Details(login_Details):</pre>	a function that displays your details by opening the file and read it only your data
<u>CHANGE PASSWORD</u>	<pre>def Change_Pass(login_Details):</pre>	function that can make you change your password
<u>CHANGE USERNAME</u>	<pre>def Change_User_Name(login_Details):</pre>	a function that change your username available only for admin and superuser
<u>CURRENT LOAN MENU</u>	<pre>def Current_Loan_Menu(login_Details):</pre>	a function that displays you the loan end menu
<u>ISLAMIC LOAN MENU</u>	<pre>def Islamic_Loan_Menu(login_Details):</pre>	a function that displays you the Islamic loan menu
<u>LOAN DEPOSIT</u>	<pre>def loan_deposit(login_Details,loanPayment,loanAmount,date):</pre>	a function that displays for you how much that you need to pay the next month and save your transaction details in the file
<u>LOAN DEPOSIT PAY</u>	<pre>def loan_deposit_pay(loanPayment,login_Details,date,loanAmount):</pre>	a function that helped the loan deposit with saving the details
<u>PAY THE LOAN</u>	<pre>def pay_The_Loan(login_Details):</pre>	a function that make you pay your loan

<u>REPORT</u>	<pre>def Report(login_Details):</pre>	function that opened the transaction file and read it and display for the customer his transaction history
<u>SHOW ALL TRANS</u>	<pre>def Show_All_Trans():</pre>	a function that shows all the transaction that made by the customers only the admin and the superuser can see it

37 CONCLUSION:

I learned the way to apply the abilities I learned in applied science categories to real-world things. "Trash in, trash out" became apparent to American state throughout this endeavor (Tech Target Contributor, 2008). It's attainable for code malfunctions to be caused by incorrect input. Professors and friends can perpetually teach American state the way to be a lot of easy and economical. I will be able to perpetually try for this. This course of study can hopefully improve my ability to jot down code. Take a course on system visualization in many programming languages. As a result, I will be ready to come back up with artistic ideas that profit the full community. Victimisation the incorrect knowledge or change of state with the code may produce issues.

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