

# **INTRODUCTION**

**The project starts with –**

Enter 1- NEW USER

Enter 2 - DISPLAY ALL CUSTOMERS

Enter 3 - SEARCH CUSTOMER

Enter 4 - OPEN NEW ACCOUNT

Enter 5 - DISPLAY ALL ACCOUNTS

Enter 6 - SEARCH AN ACCOUNT

Enter 7 - EXIT

Enter 0 - HELP

## **Process**

FIRSTLY, we have done the planning in a paper work regarding what have to do on the assigned project **ATM PROJECT.**

SECONDLY, we discussed our planning with our subject teacher and then he provided us the right path to perform the work.

NEXT, we started our project on foot paths of our subject teacher.

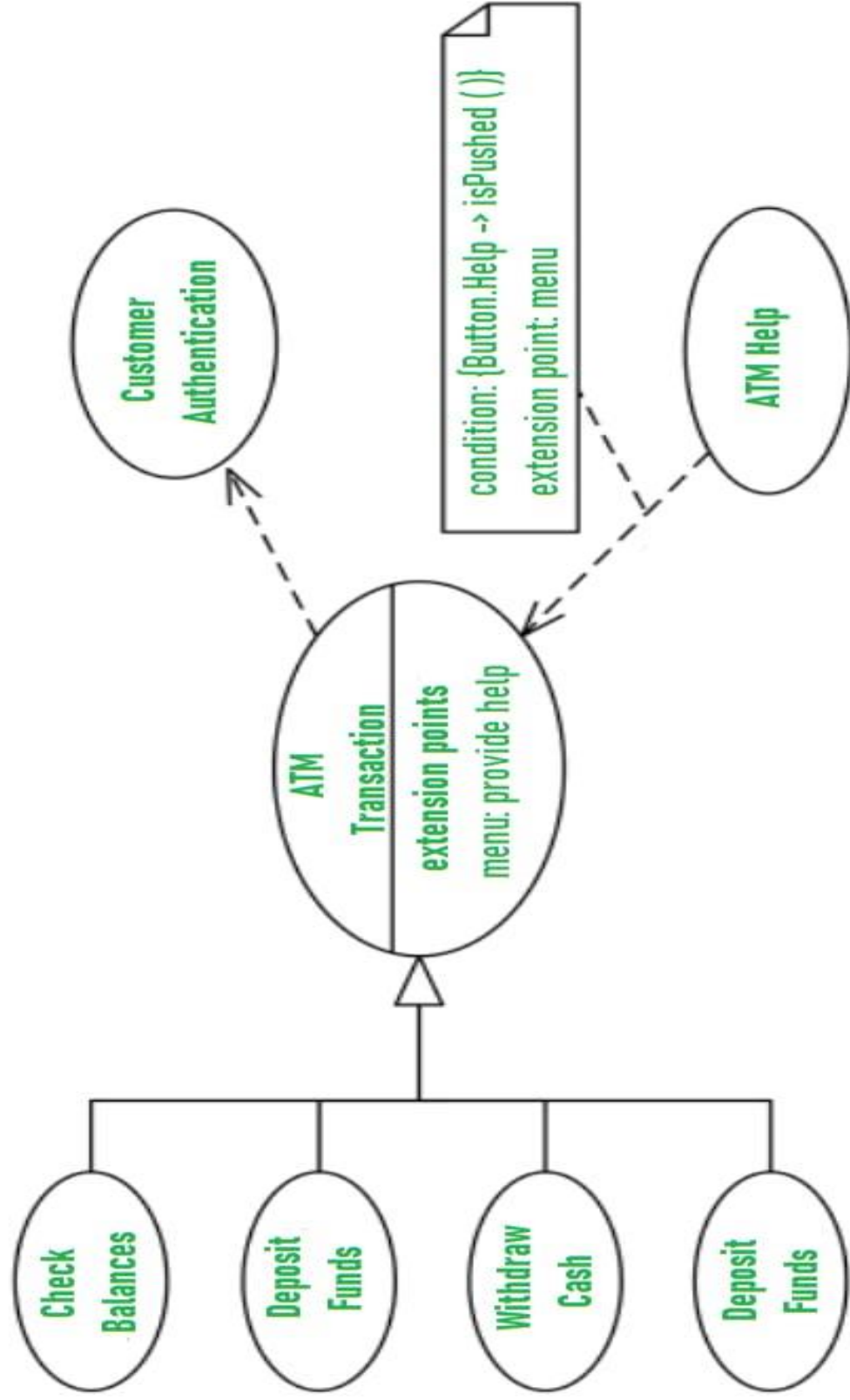
THEN, we started our coding, coding took around 2 and half months for completion.

## **OBJECTIVE OF THE PROJECT**

ATM Simulator project is written in Python. The project file contains a python script (atm.py). This is a simple console based system which is very easy to use. Talking about the system, it contains various functions which include Account Statement, Withdrawing, Depositing amount and changing the pin. Here, at first the user has to enter an existing username, when the username matches the system proceed toward the next procedure i.e asking pin number. When a user passes all these sign-in procedures, he/she can use all those features. It is too easy to use, he/she can check their respective account statements.

While depositing or withdrawing amount, he/she just has to enter the amount then the system calculates the total remaining balance of the respective account and displays to the user. And the user can view all these transactions from the account statement. In this ATM Simulator, the user can also change the pin number. For this, the user has to enter the New pin code and then confirm it in order to change the pin code. This simple console based ATM simulator provides the simple account balance management of a respective account. It contains all the essential features. There is no database connection or neither any external text or other files used in this mini project to save user's data. Everything is set inside the source code whether its pin code or the amount

## DESIGN OF THE SYSTEM



## Use Case Diagram for Customer Authentication

# **System Requirements of the Project**

## **Recommended System Requirements**

- Processors: Intel® Core™ i3 processor 4300M at 2.60 GHz.
- Disk space: 2 to 4 GB.
- Operating systems: Windows® 10, MACOS, and UBUNTU.
- Python Versions: 3.X.X or Higher.

## **Minimum System Requirements**

- Processors: Intel Atom® processor or Intel® Core™ i3 processor. \*
- Disk space: 1 GB.
- Operating systems: Windows 7 or later, MACOS, and UBUNTU.
- Python Versions: 2.7.X, 3.6.X.

## **Prerequisites before installing MySQL Connector Python**

- You need root or administrator privilege to perform the installation process.
- Python must be installed on your machine.

**Note:** – MySQL Connector Python requires python to be in the system's PATH. Installation fails if it doesn't find Python.

On Windows, If Python doesn't exist in the system's PATH, please manually add the directory containing python.exe yourself.

# PYTHON CODING

```
#####ATM PROJECT#####
```

```
#####Designed and Maintained By:
```

```
#####THARUNKUMAAR.U
```

```
import mysql.connector
```

```
# GLOBAL VARIABLES DECLARATION
```

```
myConnection = ""
```

```
cursor = ""
```

```
password = ""
```

```
cid = ""
```

```
#MODULE TO CHECK MYSQL CONNECTIVITY
```

```
def MYSQLconnectionCheck ():
```

```
    global myConnection
```

```
    global userName
```

```
    global password
```

```
    userName = input("\n ENTER MYSQL SERVER'S USERNAME : ")
```

```
    password = input("\n ENTER MYSQL SERVER'S PASSWORD : ")
```

```
    myConnection=mysql.connector.connect(host="localhost",user=userName,passwd=password , database='atm',  
auth_plugin='mysql_native_password' )
```

```
    if myConnection:
```

```
        return myConnection
```

```
    else:
```

```
        print("\nERROR ESTABLISHING MYSQL CONNECTION !")
```

```
        myConnection.close()
```

```
# MODULE TO CREATE NEW CUSATOMER
```

```
def newCustomer():
```

```
    global cid
```

```
    if myConnection:
```

```
        cursor=myConnection.cursor()
```

```
        createTable = """CREATE TABLE IF NOT EXISTS CUSTOMER(CID VARCHAR(10) PRIMARY  
KEY,CNAME VARCHAR(30) NOT NULL,ADDRESS VARCHAR(30)NOT NULL ,PHONE VARCHAR(12) NOT  
NULL) """
```

```
        cursor.execute(createTable)
```

```
        print("\nPlease Fill All The Information Carefully !")
```

```
        cid=input("Please Enter Customer ID : ")
```

```
        cname=input("Please Enter Customer Name : ")
```

```
        address=input("Please Enter Customer Address : ")
```

```
        phone=input("Please Enter Customer Contact No. : ")
```

```
sql='INSERT INTO CUSTOMER(cid,cname,address,phone) values(%s,%s,%s,%s)'
values=(cid,cname,address,phone)
cursor.execute(sql,values)
cursor.execute("COMMIT")
cursor.close()
print("\nNew Customer Added Successfully !")
```

# MODULE TO DISPLAY CUSTOMER INFORMATION :

```
def displayAllCustomer():
    if myConnection:
        cursor=myConnection.cursor()
        cursor.execute("SELECT * FROM CUSTOMER")
        data = cursor.fetchall()
        if data:
            print("\n*****DETAILS OF ALL CUSTOMER*****")
            print(data)
        else:
            print("Sorry ! No Record Found , Please Try Again ! ")
    else:
        print("\nERROR ESTABLISHING MYSQL CONNECTION !")
```

# MODULE TO SEARCH A CUSTOMER

```
def searchCustomer():
    global cid
    if myConnection:
        cursor=myConnection.cursor()
        cid=input("Please Enter Customer ID : ")
        sql="SELECT * FROM CUSTOMER WHERE CID = %s"
        values=(cid,)
        data=cursor.execute(sql,values)
        data = cursor.fetchall()
        if data:
            print("\n*****CUSTOMER DETAILS*****")
            print(data)
        else:
            print("Sorry ! Customer NOT Found , Please Try Again ! ")
    else:
        print("\nSomething Went Wrong ,Please Try Again !")
```

# MODULE TO OPEN A NEW ACCOUNT

```

def newAccount():
    global cid
    if myConnection:
        cursor=myConnection.cursor()
        cid=input("Please Enter Customer ID : ")
        sql="SELECT * FROM CUSTOMER WHERE CID = %s"
        values=(cid,)
        data=cursor.execute(sql,values)
        data = cursor.fetchall()
        if data:
            createTable = """CREATE TABLE IF NOT EXISTS ACCOUNT(CID VARCHAR(10),ACCOUNT_NO INT
PRIMARY KEY,ACCOUNT_TYPE VARCHAR(20) NOT NULL ,AMOUNT INT NOT NULL , PIN INT NOT
NULL UNIQUE)"""
            cursor.execute(createTable)
            account_no=int(input("PLEASE ENTER THE ACCOUNT NUMBER [0-9]: "))
            account_type=input("PLEASE ENTER THE ACCOUNT TYPE [ S-SAVING / C - CURRENT : ")
            amount=int(input("PLEASE ENTER THE AMOUNT TO DEPOSIT : "))
            ATM_pin=int(input("PLEASE ENTER THE ATM PIN [ FOUR DIGITIS ONLY ] : "))
            sql='INSERT INTO ACCOUNT (cid,account_no,account_type,amount ,pin) VALUES (%s,%s,%s,%s,%s)'
            values1=(cid,account_no,account_type,amount,ATM_pin)

            cursor.execute(sql,values1)
            cursor.execute("COMMIT")
            print("\nNew Account Opend Successfully !")
        else:
            print("Sorry ! Customer NOT Found , Please Try Again ! ")

    else:
        print("\nSomething Went Wrong ,Please Try Again !")

```

# MODULE TO DISPLAY ALL ACCOUNTS

```

def displayAllAccounts():
    if myConnection:
        cursor=myConnection.cursor()
        cursor.execute("SELECT * FROM ACCOUNT")
        data = cursor.fetchall()
        if data:
            print("\n*****DETAILS OF ALL CUSTOMER*****")
            print(data)
        else:
            print("Sorry ! No Account Information , Please Try Again ! ")
    else:
        print("\nERROR ESTABLISHING MYSQL CONNECTION !")

```

# MODULE TO SEARCH AN ACCOUNT

```

def searchAccount():
    global cid
    if myConnection:
        cursor=myConnection.cursor()
        cid=input("PLEASE ENTER CUSTOMER ID : ")
        account_no=int(input("PLEASE ENTER THE ACCOUNT NUMBER [0-9]: "))
        sql="SELECT * FROM ACCOUNT WHERE CID = %s AND ACCOUNT_NO =%s"
        values=(cid,account_no)
        data=cursor.execute(sql,values)
        data = cursor.fetchall()
        if data:
            print("\n*****CUSTOMER ACCOUNT DETAILS*****")
            print(data)
        else:
            print("Sorry ! Account Infomation NOT Found , Please Try Again ! ")
    else:
        print("Somthing Went Wrong ,Please Try Again !")

```

#### # MODULE TO WITHDRAW AMOUNT

```

def withdrawAmount():
    count =3
    if myConnection:
        cursor=myConnection.cursor()
        account_no=int(input("PLEASE ENTER THE ACCOUNT NUMBER [0-9]: "))
        sql="SELECT * FROM ACCOUNT WHERE ACCOUNT_NO =%s"

        values=(account_no,)
        data=cursor.execute(sql,values)
        data = cursor.fetchall()
        if data:
            while True:
                ATM_PIN=int(input("PLEASE ENTER THE ATM PIN - ONLY 3 ATTEMPTS ARE ALLOWED : "))
                sql='SELECT * FROM ACCOUNT WHERE PIN = %s'
                values=(ATM_PIN,)
                cursor.execute(sql,values)
                data = cursor.fetchall()
                if data:
                    amount=int(input("PLEASE ENTER AMOUNT TO WITHDRAW : "))
                    sql='UPDATE ACCOUNT SET AMOUNT = AMOUNT - %s'
                    cursor.execute(sql ,(amount,))
                    cursor.execute("COMMIT")
                    print("***** TRANSACTION SUCCESSFULLY COMPLETED ! *****")
                    print("***** PLEASE TAKE MONEY AND REMOVE YOUR CARD ! *****")
                    break
                else:
                    print("Wrong Pin ! Please enter a Valid PIN")
                    count=count-1
                    print("You are left with only ",count ,"Attempts")
            if count == 0:
                print("Your Card has been Blocked , Please Visit the Branch to activate it")
                break

```



```
else:
    print("Sorry ! Account Infomation NOT Found , Please Try Again ! ")
```

```
#MODULE TO PROVIDE HELP FOR USER
```

```
def helpMe():
    print("Please, Visit The Branch To Download The Mannual !!!")
```

```
# MAIN SCREEN
```

```
print("*****ATM PROJECT*****")
print("*****Designed and Maintained By:")
print("*****THARUNKUMAAR.U**")
```

```
#STARTING POINT OF THE SYSTEM
```

```
myConnection = MySQLconnectionCheck ()
if myConnection:
    MySQLconnectionCheck()
    while(1):
        print("\n!=====*****=====!")

        print("! PLEASE ENTER 1 FOR NEW USER      !")
        print("! PLEASE ENTER 2 TO DISPLAY ALL CUSTOMERS      !")
        print("! PLEASE ENTER 3 TO SEARCH A CUSTOMER      !")

        print("! PLEASE ENTER 4 TO OPEN NEW ACCOUNT      !")
        print("! PLEASE ENTER 5 TO DISPLAY ALL ACCOUNTS      !")
        print("! PLEASE ENTER 6 TO SEARCH AN ACCOUNT      !")
        print("! PLEASE ENTER 7 TO WITHDRAW AMOUNT      !")
        print("! PLEASE ENTER 8 TO EXIT      !")
        print("! PLEASE ENTER 0 FOR HELP      !")
        print("\n!=====*****END*****=====!")
        choice = int(input("\n Please Enter Your Choice : "))
        if choice == 1:
            newCustomer()
        elif choice == 2:
            displayAllCustomer()
        elif choice == 3:
            searchCustomer()
        elif choice == 4:
            newAccount()
```

```
elif choice==5:
    displayAllAccounts()
elif choice==6:
    searchAccount()
elif choice==7:
    withdrawAmount()
elif choice==8:
    break
elif choice==0:
    helpMe()
else:
    print("Sorry ,May Be You Are Giving Me Wrong Input, Please Try Again !!! ")
else:
    print("Check Your MYSQL Connection First !!! ")
```

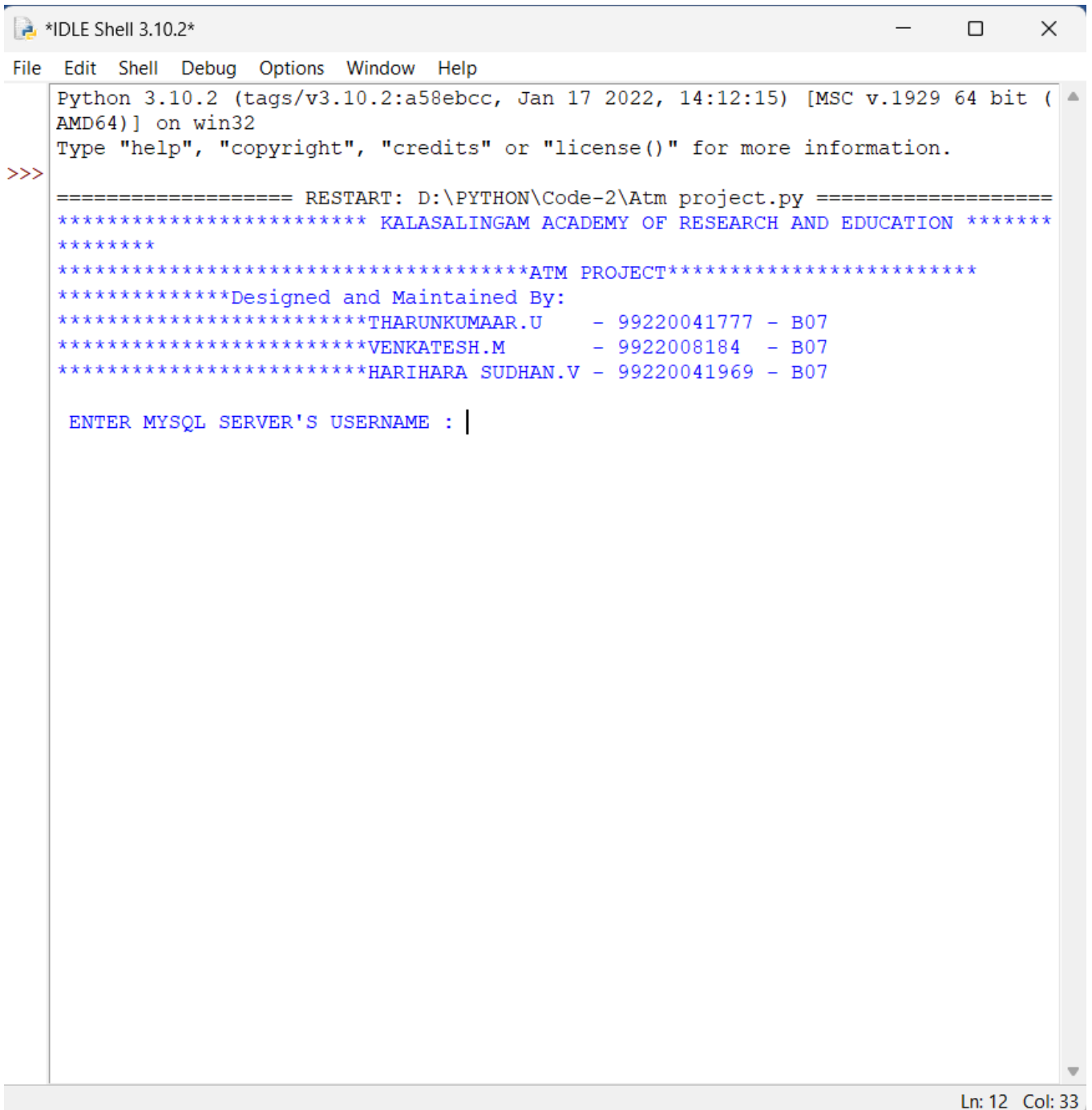
#THANKING YOU :) !!!

# END OF THE PROJECT

# Output of the Project

Finally, we conclude our work and present the output of the Project.

## MAIN SCREEN



```
*IDLE Shell 3.10.2*
File Edit Shell Debug Options Window Help
Python 3.10.2 (tags/v3.10.2:a58ebcc, Jan 17 2022, 14:12:15) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: D:\PYTHON\Code-2\Atm project.py =====
***** KALASALINGAM ACADEMY OF RESEARCH AND EDUCATION *****
*****
*****ATM PROJECT*****
*****Designed and Maintained By:
*****THARUNKUMAAR.U - 99220041777 - B07
*****VENKATESH.M - 9922008184 - B07
*****HARIHARA SUDHAN.V - 99220041969 - B07
*****
ENTER MYSQL SERVER'S USERNAME : |
Ln: 12 Col: 33
```

# STARTING OF SOFTWARE

```
C:\WINDOWS\py.exe X + v

*****ATM PROJECT*****
*****Designed and Maintained By:
*****THARUNKUMAAR.U

ENTER MYSQL SERVER'S USERNAME : root

ENTER MYSQL SERVER'S PASSWORD : root

ENTER MYSQL SERVER'S USERNAME : root

ENTER MYSQL SERVER'S PASSWORD : root

!=====!
! PLEASE ENTER 1 FOR NEW USER !
! PLEASE ENTER 2 TO DISPLAY ALL CUSTOMERS !
! PLEASE ENTER 3 TO SEARCH A CUSTOMER !
! PLEASE ENTER 4 TO OPEN NEW ACCOUNT !
! PLEASE ENTER 5 TO DISPLAY ALL ACCOUNTS !
! PLEASE ENTER 6 TO SEARCH AN ACCOUNT !
! PLEASE ENTER 7 TO WITHDRAW AMOUNT !
! PLEASE ENTER 8 TO EXIT !
! PLEASE ENTER 0 FOR HELP !

!=====!*****END*****!

Please Enter Your Choice : |
```

# FOR NEW USER

```
*IDLE Shell 3.10.2*
File Edit Shell Debug Options Window Help

CONGRATULATIONS ! YOUR MYSQL CONNECTION HAS BEEN ESTABLISHED !

!=====*****!
! PLEASE ENTER 1 FOR NEW CUSTOMER!
! PLEASE ENTER 2 TO DISPLAY ALL CUSTOMERS !
! PLEASE ENTER 3 TO SEARCH A CUSTOMER !
! PLEASE ENTER 4 TO OPEN NEW ACCOUNT !
! PLEASE ENTER 5 TO DISPLAY ALL ACCOUNTS !
! PLEASE ENTER 6 TO SEARCH AN ACCOUNT !
! PLEASE ENTER 7 TO WITHDRAW AMOUNT !
! PLEASE ENTER 8 TO EXIT !
!=====*****END*****!

Please Enter Your Choice : 1
CREATE TABLE IF NOT EXISTS CUSTOMER(CID int(10) PRIMARY KEY ,CNAME VARCHAR(30) NOT NULL
,ADDRESS VARCHAR(30)NOT NULL ,PHONE VARCHAR(10) NOT NULL)

Please Fill All The Information Carefully !
Please Enter Customer ID : 100
Please Enter Customer Name : Tharun Kumaar U
Please Enter Customer Address : Bharathi Nagar
Please Enter Customer Contact No. : 8434567891

New Customer Added Successfully !

!=====*****!
! PLEASE ENTER 1 FOR NEW CUSTOMER!
! PLEASE ENTER 2 TO DISPLAY ALL CUSTOMERS !
! PLEASE ENTER 3 TO SEARCH A CUSTOMER !
! PLEASE ENTER 4 TO OPEN NEW ACCOUNT !
! PLEASE ENTER 5 TO DISPLAY ALL ACCOUNTS !
! PLEASE ENTER 6 TO SEARCH AN ACCOUNT !
! PLEASE ENTER 7 TO WITHDRAW AMOUNT !
! PLEASE ENTER 8 TO EXIT !
!=====*****END*****!

Please Enter Your Choice : |
```

Ln: 53 Col: 28

# DISPLAY CUSTOMER DETAILS

```
*IDLE Shell 3.10.2*
File Edit Shell Debug Options Window Help

,ADDRESS VARCHAR(30)NOT NULL ,PHONE VARCHAR(10) NOT NULL)

Please Fill All The Information Carefully !
Please Enter Customer ID : 100
Please Enter Customer Name : Tharun Kumaar U
Please Enter Customer Address : Bharathi Nagar
Please Enter Customer Contact No. : 8434567891

New Customer Added Successfully !

!=====*****!
! PLEASE ENTER 1 FOR NEW CUSTOMER!
! PLEASE ENTER 2 TO DISPLAY ALL CUSTOMERS !
! PLEASE ENTER 3 TO SEARCH A CUSTOMER !
! PLEASE ENTER 4 TO OPEN NEW ACCOUNT !
! PLEASE ENTER 5 TO DISPLAY ALL ACCOUNTS !
! PLEASE ENTER 6 TO SEARCH AN ACCOUNT !
! PLEASE ENTER 7 TO WITHDRAW AMOUNT !
! PLEASE ENTER 8 TO EXIT !
!=====*****!

Please Enter Your Choice : 2

*****DETAILS OF ALL CUSTOMER*****
[(100, 'Tharun Kumaar U', 'Bharathi Nagar', '8434567891')]

!=====*****!
! PLEASE ENTER 1 FOR NEW CUSTOMER!
! PLEASE ENTER 2 TO DISPLAY ALL CUSTOMERS !
! PLEASE ENTER 3 TO SEARCH A CUSTOMER !
! PLEASE ENTER 4 TO OPEN NEW ACCOUNT !
! PLEASE ENTER 5 TO DISPLAY ALL ACCOUNTS !
! PLEASE ENTER 6 TO SEARCH AN ACCOUNT !
! PLEASE ENTER 7 TO WITHDRAW AMOUNT !
! PLEASE ENTER 8 TO EXIT !
!=====*****!

Please Enter Your Choice :
```

# TO SEARCH A CUSTOMER

```
*IDLE Shell 3.10.2*
File Edit Shell Debug Options Window Help

!=====*****!
! PLEASE ENTER 1 FOR NEW CUSTOMER!
! PLEASE ENTER 2 TO DISPLAY ALL CUSTOMERS !
! PLEASE ENTER 3 TO SEARCH A CUSTOMER !
! PLEASE ENTER 4 TO OPEN NEW ACCOUNT !
! PLEASE ENTER 5 TO DISPLAY ALL ACCOUNTS !
! PLEASE ENTER 6 TO SEARCH AN ACCOUNT !
! PLEASE ENTER 7 TO WITHDRAW AMOUNT !
! PLEASE ENTER 8 TO EXIT !
!=====*****END*****!

Please Enter Your Choice : 3
Please Enter Customer ID : 100

*****CUSTOMER DETAILS*****
[(100, 'Tharun Kumaar U', 'Bharathi Nagar', '8434567891')]

!=====*****!
! PLEASE ENTER 1 FOR NEW CUSTOMER!
! PLEASE ENTER 2 TO DISPLAY ALL CUSTOMERS !
! PLEASE ENTER 3 TO SEARCH A CUSTOMER !
! PLEASE ENTER 4 TO OPEN NEW ACCOUNT !
! PLEASE ENTER 5 TO DISPLAY ALL ACCOUNTS !
! PLEASE ENTER 6 TO SEARCH AN ACCOUNT !
! PLEASE ENTER 7 TO WITHDRAW AMOUNT !
! PLEASE ENTER 8 TO EXIT !
!=====*****END*****!

Please Enter Your Choice : 3
Please Enter Customer ID : 101
Sorry ! Customer NOT Found , Please Try Again !

!=====*****!
! PLEASE ENTER 1 FOR NEW CUSTOMER!
! PLEASE ENTER 2 TO DISPLAY ALL CUSTOMERS !
! PLEASE ENTER 3 TO SEARCH A CUSTOMER !
! PLEASE ENTER 4 TO OPEN NEW ACCOUNT !
! PLEASE ENTER 5 TO DISPLAY ALL ACCOUNTS !
```

# TO OPEN NEW ACCOUNT

```
*IDLE Shell 3.10.2*
File Edit Shell Debug Options Window Help

!=====*****=====!
!     PLEASE ENTER 1 FOR NEW CUSTOMER!
!     PLEASE ENTER 2 TO DISPLAY ALL CUSTOMERS      !
!     PLEASE ENTER 3 TO SEARCH A CUSTOMER          !
!     PLEASE ENTER 4 TO OPEN NEW ACCOUNT            !
!     PLEASE ENTER 5 TO DISPLAY ALL ACCOUNTS        !
!     PLEASE ENTER 6 TO SEARCH AN ACCOUNT           !
!     PLEASE ENTER 7 TO WITHDRAW AMOUNT             !
!     PLEASE ENTER 8 TO EXIT !
!
!=====*****END*****=====!

Please Enter Your Choice : 4
Please Enter Customer ID : 100
CREATE TABLE IF NOT EXISTS ACCOUNT(CID VARCHAR(10),ACCOUNT_NO INT PRIMARY KEY,AC
COUNT_TYPE VARCHAR(20) NOT NULL ,AMOUNT INT NOT NULL , PIN INT NOT NULL )
PLEASE ENTER THE ACCOUNT NUMBER [0-9]: 202256004
PLEASE ENTER THE ACCOUNT TYPE [ S-SAVING / C - CURRENT : S
PLEASE ENTER THE AMOUNT TO DEPOSIT : 1000000
PLEASE ENTER THE ATM PIN [ FOUR DIGITIS ONLY ] : 1001

New Account Opend Successfully !

!=====*****=====!
!     PLEASE ENTER 1 FOR NEW CUSTOMER!
!     PLEASE ENTER 2 TO DISPLAY ALL CUSTOMERS      !
!     PLEASE ENTER 3 TO SEARCH A CUSTOMER          !
!     PLEASE ENTER 4 TO OPEN NEW ACCOUNT            !
!     PLEASE ENTER 5 TO DISPLAY ALL ACCOUNTS        !
!     PLEASE ENTER 6 TO SEARCH AN ACCOUNT           !
!     PLEASE ENTER 7 TO WITHDRAW AMOUNT             !
!     PLEASE ENTER 8 TO EXIT !
!
!=====*****END*****=====!

Please Enter Your Choice : 4
Please Enter Customer ID : 101
Sorry ! Customer NOT Found , Please Try Again !

Ln: 119 Col: 28
```



# TO DISPLAY ALL ACCOUNTS

```
*IDLE Shell 3.10.2*
File Edit Shell Debug Options Window Help
!      PLEASE ENTER 6 TO SEARCH AN ACCOUNT      !
!      PLEASE ENTER 7 TO WITHDRAW AMOUNT         !
!      PLEASE ENTER 8 TO EXIT  !
!=====*****END*****=====!
Please Enter Your Choice : 4
Please Enter Customer ID : 101
Sorry ! Customer NOT Found , Please Try Again !
!=====*****END*****=====!
!      PLEASE ENTER 1 FOR NEW CUSTOMER!
!      PLEASE ENTER 2 TO DISPLAY ALL CUSTOMERS   !
!      PLEASE ENTER 3 TO SEARCH A CUSTOMER       !
!      PLEASE ENTER 4 TO OPEN NEW ACCOUNT        !
!      PLEASE ENTER 5 TO DISPLAY ALL ACCOUNTS    !
!      PLEASE ENTER 6 TO SEARCH AN ACCOUNT       !
!      PLEASE ENTER 7 TO WITHDRAW AMOUNT         !
!      PLEASE ENTER 8 TO EXIT  !
!=====*****END*****=====!
Please Enter Your Choice : 5
*****DETAILS OF ALL CUSTOMER*****
[('100', 202256004, 'S', 1000000, 1001)]
!=====*****END*****=====!
!      PLEASE ENTER 1 FOR NEW CUSTOMER!
!      PLEASE ENTER 2 TO DISPLAY ALL CUSTOMERS   !
!      PLEASE ENTER 3 TO SEARCH A CUSTOMER       !
!      PLEASE ENTER 4 TO OPEN NEW ACCOUNT        !
!      PLEASE ENTER 5 TO DISPLAY ALL ACCOUNTS    !
!      PLEASE ENTER 6 TO SEARCH AN ACCOUNT       !
!      PLEASE ENTER 7 TO WITHDRAW AMOUNT         !
!      PLEASE ENTER 8 TO EXIT  !
!=====*****END*****=====!
Please Enter Your Choice : |
```

# TO SEARCH AN ACCOUNT

```
*IDLE Shell 3.10.2*
File Edit Shell Debug Options Window Help

!=====*****END*****=====!

Please Enter Your Choice : 6
PLEASE ENTER CUSTOMER ID : 100
PLEASE ENTER THE ACCOUNT NUMBER [0-9]: 202256004

*****CUSTOMER ACCOUNT DETAILS*****
[('100', 202256004, 'S', 1000000, 1001)]

!=====*****END*****=====!

! PLEASE ENTER 1 FOR NEW CUSTOMER!
! PLEASE ENTER 2 TO DISPLAY ALL CUSTOMERS !
! PLEASE ENTER 3 TO SEARCH A CUSTOMER !
! PLEASE ENTER 4 TO OPEN NEW ACCOUNT !
! PLEASE ENTER 5 TO DISPLAY ALL ACCOUNTS !
! PLEASE ENTER 6 TO SEARCH AN ACCOUNT !
! PLEASE ENTER 7 TO WITHDRAW AMOUNT !
! PLEASE ENTER 8 TO EXIT !

!=====*****END*****=====!

Please Enter Your Choice : 6
PLEASE ENTER CUSTOMER ID : 101
PLEASE ENTER THE ACCOUNT NUMBER [0-9]: 202278005
Sorry ! Account Infromation NOT Found , Please Try Again !

!=====*****END*****=====!

! PLEASE ENTER 1 FOR NEW CUSTOMER!
! PLEASE ENTER 2 TO DISPLAY ALL CUSTOMERS !
! PLEASE ENTER 3 TO SEARCH A CUSTOMER !
! PLEASE ENTER 4 TO OPEN NEW ACCOUNT !
! PLEASE ENTER 5 TO DISPLAY ALL ACCOUNTS !
! PLEASE ENTER 6 TO SEARCH AN ACCOUNT !
! PLEASE ENTER 7 TO WITHDRAW AMOUNT !
! PLEASE ENTER 8 TO EXIT !

!=====*****END*****=====!

Please Enter Your Choice : |
```

# TO WITHDRAW AMOUNT

IDLE Shell 3.10.2

File Edit Shell Debug Options Window Help

```
!      PLEASE ENTER 7 TO WITHDRAW AMOUNT      !
!      PLEASE ENTER 8 TO EXIT      !

!=====*****END*****=====!

Please Enter Your Choice : 6
PLEASE ENTER CUSTOMER ID : 101
PLEASE ENTER THE ACCOUNT NUMBER [0-9]: 202278005
Sorry ! Account Infromation NOT Found , Please Try Again !

!=====*****END*****=====!

!      PLEASE ENTER 1 FOR NEW CUSTOMER!
!      PLEASE ENTER 2 TO DISPLAY ALL CUSTOMERS      !
!      PLEASE ENTER 3 TO SEARCH A CUSTOMER      !
!      PLEASE ENTER 4 TO OPEN NEW ACCOUNT      !
!      PLEASE ENTER 5 TO DISPLAY ALL ACCOUNTS      !
!      PLEASE ENTER 6 TO SEARCH AN ACCOUNT      !
!      PLEASE ENTER 7 TO WITHDRAW AMOUNT      !
!      PLEASE ENTER 8 TO EXIT      !

!=====*****END*****=====!

Please Enter Your Choice : 7
PLEASE ENTER THE ACCOUNT NUMBER [0-9]: 202256004
PLEASE ENTER THE ATM PIN - ONLY 3 ATTEMPTS ARE ALLOWED : 1001
PLEASE ENTER AMOUNT TO WITHDRAW : 15000
***** TRANSACTION SUCCESSFULLY COMPLETED ! *****
***** PLEASE TAKE ONEY AND REMOVE YOUR CARD ! *****

!=====*****END*****=====!

!      PLEASE ENTER 1 FOR NEW CUSTOMER!
!      PLEASE ENTER 2 TO DISPLAY ALL CUSTOMERS      !
!      PLEASE ENTER 3 TO SEARCH A CUSTOMER      !
!      PLEASE ENTER 4 TO OPEN NEW ACCOUNT      !
!      PLEASE ENTER 5 TO DISPLAY ALL ACCOUNTS      !
!      PLEASE ENTER 6 TO SEARCH AN ACCOUNT      !
!      PLEASE ENTER 7 TO WITHDRAW AMOUNT      !
!      PLEASE ENTER 8 TO EXIT      !

!=====*****END*****=====!
```

Ln: 297 Col: 0

# BLOCKED PIN

```
*IDLE Shell 3.10.2*
File Edit Shell Debug Options Window Help

!      PLEASE ENTER 6 TO SEARCH AN ACCOUNT      !
!      PLEASE ENTER 7 TO WITHDRAW AMOUNT         !
!      PLEASE ENTER 8 TO EXIT !

!=====*****END*****=====!

Please Enter Your Choice : 7
PLEASE ENTER THE ACCOUNT NUMBER [0-9]: 202256004
PLEASE ENTER THE ATM PIN - ONLY 3 ATTEMPTS ARE ALLOWED : 1001
PLEASE ENTER AMOUNT TO WITHDRAW : 0
***** TRANSACTION SUCCESSFULLY COMPLETED ! *****
*****PLEASE TAKE ONEY AND REMOVE YOUR CARD ! *****

!=====*****END*****=====!

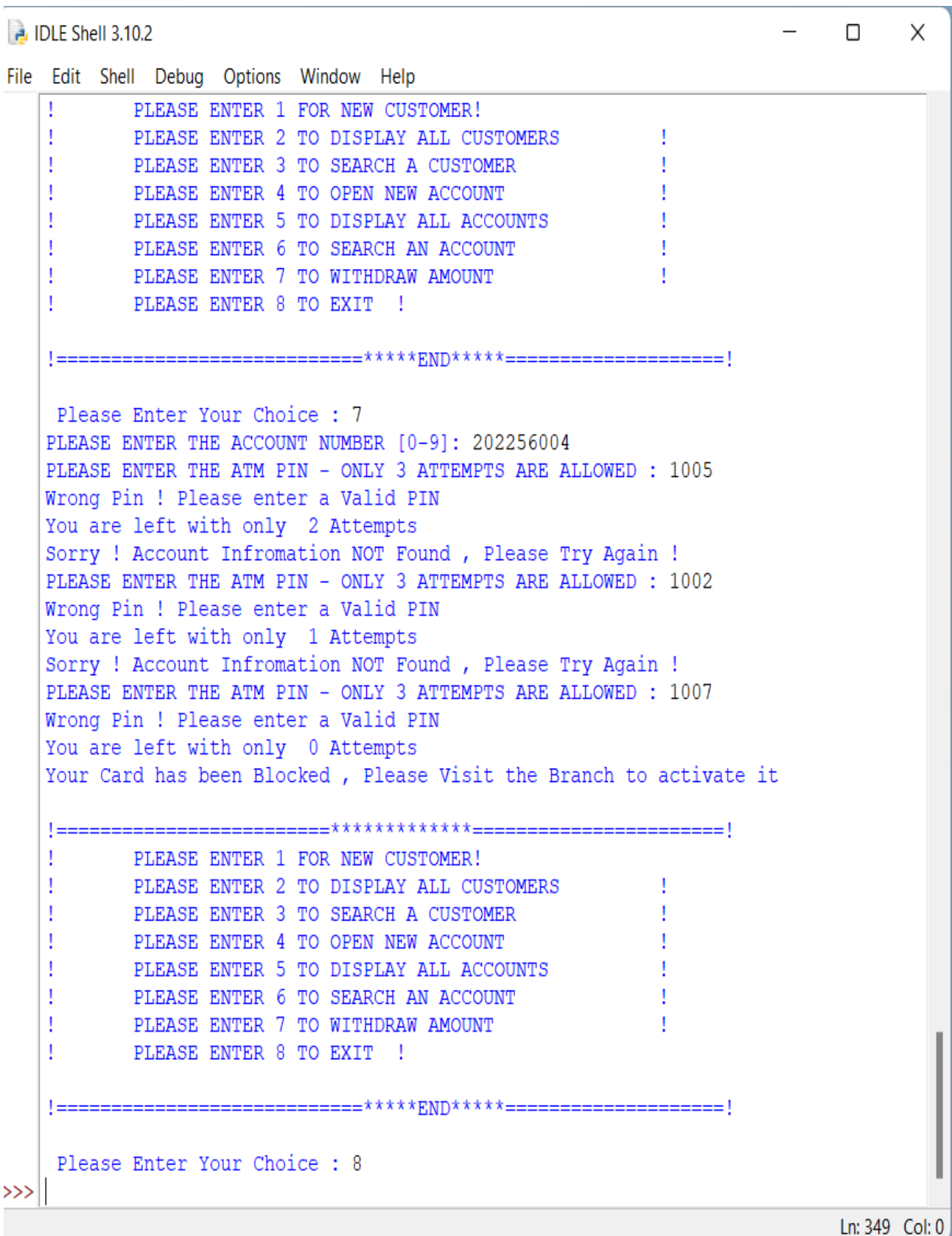
!      PLEASE ENTER 1 FOR NEW CUSTOMER!
!      PLEASE ENTER 2 TO DISPLAY ALL CUSTOMERS      !
!      PLEASE ENTER 3 TO SEARCH A CUSTOMER          !
!      PLEASE ENTER 4 TO OPEN NEW ACCOUNT           !
!      PLEASE ENTER 5 TO DISPLAY ALL ACCOUNTS       !
!      PLEASE ENTER 6 TO SEARCH AN ACCOUNT          !
!      PLEASE ENTER 7 TO WITHDRAW AMOUNT            !
!      PLEASE ENTER 8 TO EXIT !

!=====*****END*****=====!

Please Enter Your Choice : 7
PLEASE ENTER THE ACCOUNT NUMBER [0-9]: 202256004
PLEASE ENTER THE ATM PIN - ONLY 3 ATTEMPTS ARE ALLOWED : 1005
Wrong Pin ! Please enter a Valid PIN
You are left with only 2 Attempts
Sorry ! Account Infromation NOT Found , Please Try Again !
PLEASE ENTER THE ATM PIN - ONLY 3 ATTEMPTS ARE ALLOWED : 1002
Wrong Pin ! Please enter a Valid PIN
You are left with only 1 Attempts
Sorry ! Account Infromation NOT Found , Please Try Again !
PLEASE ENTER THE ATM PIN - ONLY 3 ATTEMPTS ARE ALLOWED : 1007
Wrong Pin ! Please enter a Valid PIN
You are left with only 0 Attempts
Your Card has been Blocked , Please Visit the Branch to activate it

Ln: 348 Col: 28
```

# TO EXIT



```
IDLE Shell 3.10.2
File Edit Shell Debug Options Window Help

!      PLEASE ENTER 1 FOR NEW CUSTOMER!
!      PLEASE ENTER 2 TO DISPLAY ALL CUSTOMERS      !
!      PLEASE ENTER 3 TO SEARCH A CUSTOMER          !
!      PLEASE ENTER 4 TO OPEN NEW ACCOUNT            !
!      PLEASE ENTER 5 TO DISPLAY ALL ACCOUNTS        !
!      PLEASE ENTER 6 TO SEARCH AN ACCOUNT           !
!      PLEASE ENTER 7 TO WITHDRAW AMOUNT             !
!      PLEASE ENTER 8 TO EXIT  !

!=====*****END*****=====!

Please Enter Your Choice : 7
PLEASE ENTER THE ACCOUNT NUMBER [0-9]: 202256004
PLEASE ENTER THE ATM PIN - ONLY 3 ATTEMPTS ARE ALLOWED : 1005
Wrong Pin ! Please enter a Valid PIN
You are left with only 2 Attempts
Sorry ! Account Infomation NOT Found , Please Try Again !
PLEASE ENTER THE ATM PIN - ONLY 3 ATTEMPTS ARE ALLOWED : 1002
Wrong Pin ! Please enter a Valid PIN
You are left with only 1 Attempts
Sorry ! Account Infomation NOT Found , Please Try Again !
PLEASE ENTER THE ATM PIN - ONLY 3 ATTEMPTS ARE ALLOWED : 1007
Wrong Pin ! Please enter a Valid PIN
You are left with only 0 Attempts
Your Card has been Blocked , Please Visit the Branch to activate it

!=====*****END*****=====!

!      PLEASE ENTER 1 FOR NEW CUSTOMER!
!      PLEASE ENTER 2 TO DISPLAY ALL CUSTOMERS      !
!      PLEASE ENTER 3 TO SEARCH A CUSTOMER          !
!      PLEASE ENTER 4 TO OPEN NEW ACCOUNT            !
!      PLEASE ENTER 5 TO DISPLAY ALL ACCOUNTS        !
!      PLEASE ENTER 6 TO SEARCH AN ACCOUNT           !
!      PLEASE ENTER 7 TO WITHDRAW AMOUNT             !
!      PLEASE ENTER 8 TO EXIT  !

!=====*****END*****=====!

Please Enter Your Choice : 8
>>>
```

Ln: 349 Col: 0

# DATABASE – ATM

```
MySQL 8.0 Command Line Client - Unicode
Enter password: ****
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 27
Server version: 8.0.28 MySQL Community Server - GPL

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affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> show databases;
+-----+
| Database |
+-----+
| atm      |
| information_schema |
| mysql    |
| performance_schema |
| sakila   |
| sys      |
| test     |
| world    |
+-----+
8 rows in set (0.01 sec)

mysql> use atm
Database changed
mysql>
```

# TABLE STRUCTURES

```
MySQL 8.0 Command Line Client - Unicode
8 rows in set (0.01 sec)

mysql> use atm
Database changed
mysql> show tables;
+-----+
| Tables_in_atm |
+-----+
| account      |
| customer     |
+-----+
2 rows in set (0.02 sec)

mysql> desc account;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| CID        | varchar(10) | YES  |     | NULL    |       |
| ACCOUNT_NO | int        | NO   | PRI | NULL    |       |
| ACCOUNT_TYPE | varchar(20) | NO   |     | NULL    |       |
| AMOUNT     | int        | NO   |     | NULL    |       |
| PIN        | int        | NO   |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.01 sec)

mysql> desc customer;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| CID        | int       | NO   | PRI | NULL    |       |
| CNAME      | varchar(30) | NO   |     | NULL    |       |
| ADDRESS    | varchar(30) | NO   |     | NULL    |       |
| PHONE      | varchar(10) | NO   |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.01 sec)

mysql>
```

# BACKEND DATA GENERATED THROUGH SOFTWARE

```
MySQL 8.0 Command Line Client - Unicode
| customer |
+-----+
2 rows in set (0.02 sec)

mysql> desc account;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| CID        | varchar(10) | YES  |     | NULL    |       |
| ACCOUNT_NO | int         | NO   | PRI | NULL    |       |
| ACCOUNT_TYPE | varchar(20) | NO   |     | NULL    |       |
| AMOUNT     | int         | NO   |     | NULL    |       |
| PIN        | int         | NO   |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
5 rows in set (0.01 sec)

mysql> desc customer;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| CID        | int       | NO   | PRI | NULL    |       |
| CNAME      | varchar(30) | NO   |     | NULL    |       |
| ADDRESS    | varchar(30) | NO   |     | NULL    |       |
| PHONE     | varchar(10) | NO   |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.01 sec)

mysql> select * from customer;
+-----+-----+-----+-----+
| CID | CNAME          | ADDRESS          | PHONE |
+-----+-----+-----+-----+
| 100 | Tharun Kumar U | Bharathi Nagar  | 8434567891 |
+-----+-----+-----+-----+
1 row in set (0.02 sec)

mysql> select * from account;
+-----+-----+-----+-----+-----+
| CID | ACCOUNT_NO | ACCOUNT_TYPE | AMOUNT | PIN |
+-----+-----+-----+-----+-----+
| 100 | 202256004 | S            | 985000 | 1001 |
+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)

mysql>
```



## References

1. [python.org](https://python.org)
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5. [Google's Python Class](https://www.google.com/python/class)
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