CONTENTS

INTRODUCTION

A bank is a commercial or state institution that provides financial services, including issuing money in form of coins, notes or debit cards receiving deposit of money, lending money and processing transactions.In history the primary purpose of a bank was to provide liquidity to the trading companies.Banks advance funds to allow business to purchase inventory and collected those funds back with interest. When the goods are sold for centuries the banking industry only delt with the business not customers.In personal banking system customers deposit their money in savings account or current account and he can withdraw that money with added some interest amount customers can send money to any other customer accounts, receive money from other accounts.These activities are being done offline from centuries but due to digitalisation of world these activities can be done online easily securely and efficiently from anywhere anytime.

Objective of Project:-

The project that I have under taken aims to develop a banking system that is clean user friendly and multi-functional.

Development of this application includes and number of fields such that user feels comfortable and the system appears as dynamic to him. The project Bank management system includes the following functionalities:-

- Transactions can be done with minimum user events
- All transactional details and accounts are stored in database created in MYSQL
- Customers can view their own account balance and account profile
- Customers can register themselves online and can edit their profile
- This project also promotes online transactions by giving some bonus amount on registering online hence it promotes digital India initiative Government of India

A Brief Introduction to Python

Python is widely used general purpose high level programming language.It was initially designed by Guido Van Rossumin 1991 and developed by python software foundation.It was needed for emphasis on code readability and its allows programmers to express conceptsin fewer lines of code.

- Python Laid its foundation in late 1980s.
- Implementation of python was started in December 1989 Guido Van Rossum at CWI in Netherland.
- In 1994 python one was released with the new features like filter and reduce.
- Python 2.0 Added the new features like lists comprehensions, garbage collection system.
- On December 3rd 2008 python 3 was also released it was designed to rectify fundamental flaw of the language.
- ABC programming language is said to be predecessor of the by the language which was capable of exception handling and interfacing with Amoeba operating system.
- python is influenced by the following programming languages ABC language and Modula-3

A Brief Introduction of MYSQL

MYSQL is a relational database management system (RDBMS) developed by Oracle that is based on structured query language (SQL). A database is a structured collection of data. It may be anything from a simple shopping list to a picture gallery or a place to hold the vast amounts of information in a corporate network.

MYSQL Features:-

- MYSQL is a Relational database management system
- It is easy to use you have to get only the basic knowledge of SQL you can build and interact with my SQL with only a few simple SQL queries
- It is secure as MYSQL consists of solid data security layer that protect sensitive data from intruders password are encrypted in MYSQL.
- It is free to use and you can download it from the my SQL official website
- It can handle almost any amount of data up to as much as 50 million rows or more the default file size limit is about 4GB however you can increase this number to a theoretical limit of 8Tb of data.
- It is compatible on many operating systems like Windows, Linux, IOS etc.
- Performance in MYSQL is faster more reliable and cheaper because of its Unix storage engine architecture large number of embedded applications which makes my skill very flexible high productivity by SQL used uses triggers store procedures and views which allow a developer to give a higher productivity.

System Requirements

This application Bank management system being a small, portable and a user-friendly application of computer system should have the combination of the following hardware and software requirements:-

1.Hardware Requirements:-

- Intel i3 processor or above
- minimum 2 GB ram
- at least 500 GB hard disc drive

2.Software Requirements:-

- windows 7 or above
- python version 3 and above
- my SQL version 2 and above

Installation Procedure

Python Installation:-

Open python.org Website,

Four Python 3.11 installers are available for download - two each for the 32-bit and 64-bit versions of the interpreter. The web installer is a small initial download, and it will automatically download the required components as necessary. The offline installer includes the components necessary for a default installation and only requires an internet connection for optional features. Click on Install Now. Python will be installed.

MYSQL Installation:-

Step 1: Go to the official website of MySQL and download the community server edition software. Here, you will see the option to choose the Operating System, such as Windows.

Step 2: Next, there are two options available to download the setup. Choose the version number for the MySQL community server, which you want. If you have good internet connectivity, then choose the MySQL-installer-web-community. Otherwise, choose the other one.

*Database Used:- abcbank

*Tables Used:-

```
mysql> show tables;
+------------------+
| Tables_in_abcbank |
+------------------+
| cd                |
| employee          |
| fds               |
| trans             |
+------------------+
4 rows in set (0.13 sec)
```

*Structure of Tables:-

```
mysql> desc cd;
+----------------+---------------+------+-----+---------+-------+
| Field          | Type          | Null | Key | Default | Extra |
+----------------+---------------+------+-----+---------+-------+
| Customer_ID    | varchar(12)   | NO   | PRI | NULL    |       |
| Name           | varchar(256)  | NO   |     | NULL    |       |
| Gender         | varchar(2)    | NO   |     | NULL    |       |
| Account_Number | bigint        | NO   |     | NULL    |       |
| Account_Type   | varchar(26)   | NO   |     | NULL    |       |
| Pin            | int           | NO   |     | NULL    |       |
| Balance        | decimal(16,2) | NO   |     | 0.00    |       |
+----------------+---------------+------+-----+---------+-------+
7 rows in set (0.04 sec)
```

```
mysql> desc fds;
+------------------+-------------+------+-----+---------+-------+
| Field            | Type        | Null | Key | Default | Extra |
+------------------+-------------+------+-----+---------+-------+
| Customer_ID      | varchar(12) | NO   | PRI | NULL    |       |
| FD_Number        | bigint      | NO   |     | NULL    |       |
| Start_Date       | date        | NO   |     | NULL    |       |
| Principle_Amount | int         | NO   |     | NULL    |       |
| Time_Period      | varchar(16) | NO   |     | NULL    |       |
| End_Date         | date        | NO   |     | NULL    |       |
| ROI              | float       | NO   |     | NULL    |       |
| Maturity_Amount  | float       | NO   |     | NULL    |       |
+------------------+-------------+------+-----+---------+-------+
8 rows in set (0.01 sec)
```

```
mysql> desc trans;
+------------------+---------------+------+-----+---------+-------+
| Field            | Type          | Null | Key | Default | Extra |
+------------------+---------------+------+-----+---------+-------+
| Customer_ID      | varchar(12)   | NO   |     | NULL    |       |
| Transaction_ID   | varchar(12)   | NO   | PRI | NULL    |       |
| TimeStamp        | timestamp     | NO   |     | NULL    |       |
| Amount           | decimal(16,2) | NO   |     | 0.00    |       |
| Transaction_Type | varchar(8)    | NO   |     | NULL    |       |
+------------------+---------------+------+-----+---------+-------+
5 rows in set (0.00 sec)
```

project_new.py - D:\CS-Project\project_new.py (3.9.0)

File Edit Format Run Options Window Help

```
import pymysql,time
import random,string,time,csv,os
from datetime import datetime,date,timedelta

print("-"*40,"Welcome To ABCBank","-"*40)

c = pymysql.connect(user="root",host="localhost", password="root",database="abcbank")
cur = c.cursor()

def Main_Menu():
    print("\nEnter: ")
    print("\t1: To Create New Account")
    print("\t2: To Login To Existing Account")
    print("\t3: For Permanent Closure of Account")
    print("\t4: For Opening or Closing of Fixed Deposit")
    print("\t9: To Exit\n")

def custid():
    res1 = "".join(random.choices(string.ascii_uppercase,k=4))
    res2 = "".join(random.choices(string.digits,k=4))
    res = res1 + res2
    return res

def accno():
    no = "".join(random.choices(string.digits,k=6))
    no = "1210000085" + no
    no = int(no)
    return no

def transid():
    no = "".join(random.choices(string.digits,k=12))
    return no

def tridchk():
    cur.execute("""select Transaction_ID from trans""")
    transids = cur.fetchall()
    trans_id = transid()
    while trans_id in transids[0]:
        trans_id = transid()
    return trans_id

while True:
    Main_Menu()
    choice = int(input("\nEnter Your Choice:- "))
    #Choice 1

    if choice == 1:
        try:
            name = input("Enter Your Name:- ")
            gen = input("Gender [M / F] :- ")
            typ = input("""Enter Type of Account You want to open [SAVINGS / CURRENT] :- """)
            pin = int(input("Set Your Pin [4 Digit] :- "))
            pinc=int(input("Confirm Your Pin :- "))
            cust_id = custid()
            acc_no = accno()

            while pin != pinc:
                print("\nPin Does Not Match!")
```

```
            pin = int(input("Set Your Pin:- "))
            pinc=int(input("Confirm Your Pin:- "))
            print()

        cur.execute("select Customer_ID from cd")
        ids = cur.fetchall()
        for i in ids:
            while cust_id in i:
                cust_id = custid()

        cur.execute("select Account_Number from cd")
        accnos = cur.fetchall()
        for i in accnos:
            while acc_no in i:
                acc_no = accnos()

        cur.execute(f"""insert into cd values('{cust_id}','{name}','{gen}',
                    {acc_no},'{typ}',{pin},{0})""")
        c.commit()
        print("\nAccount Created Successfully")
        cur.execute(f"select * from cd where Customer_ID='{cust_id}'")
        print("""\nPlease Note Your Account Details Carefully And
                Don't Share It With Anyone.""")
        print("\n","*"*60,"\n")
        d=cur.fetchall()
        for i in d:
            print("Customer ID:-" ,i[0])
            print("Account Name:-" ,i[1])
            print("Gender:-" ,i[2])
            print("Account Number:-" ,i[3])
            print("Account Type" ,i[4])
            print("Balance:-" ,i[6])
            print("\n","*"*60,"\n")

    except Exception as e:
        print(e)
        print("\nTry Again!")
        continue

#Choice 2

elif choice == 2:
    cid = input("\nEnter Your Customer ID :- ")
    pinn = int(input("Enter Your Pin :- "))
    cur.execute(f"""select * from cd where Customer_ID = '{cid}'
and Pin = {pinn}""")
    data = cur.fetchall()
    if len(data) == 0:
        print("\nInvalid Customer ID or Pin!")
        continue
    print(f"\nWelcome {data[0][1]},\n")
    print("Enter:- ")
    print("\t1 To Add Money")
    print("\t2 For Online Money Transfer")
    print("\t3 To Display Transaction History")
    print("\t4 To Download Transaction History")
    print("\t5 To Withdraw Money")
    print("\t6 To View Your Account Details")
```

```
117     print("\t9 To Go back to main menu")
118
119     while True:
120         ch = int(input("\nEnter Your Choice:- "))
121
122         #option 1 in choice 2
123         try:
124             if ch == 1:
125                 mon = float(input("Enter Amount To Add In Account:- "))
126                 cur.execute(f"""update cd set Balance = Balance +
127                         {mon} where Customer_ID = '{cid}'""")
128
129                 cur.execute(f"""insert into trans values ('{cid}','{tridchk()}',
130                         '{str(datetime.now())}',{mon},'CREDIT')""")
131
132                 print("\nAmount Added Successfully.")
133
134                 cur.execute(f"select Balance from cd where Customer_ID = '{cid}'")
135                 print(f"\nUpdated Balance = {cur.fetchall()[0][0]}")
136                 c.commit()
137                 continue
138
139             #option 2 in choice 2
140
141             elif ch == 2:
142                 acc2 = int(input("\nEnter Payee Account Number:- "))
143                 amt2 = float(input("Enter Amount To Be Transferred:- "))
144                 pin2 = int(input("Enter Your Account Pin To ConfirmTransaction:- "))
145
146                 cur.execute(f"""select * from cd where
147     Customer_ID = '{cid}' and Pin = {pin2}""")
148
149                 dat = cur.fetchall()
150                 if len(dat) != 0:
151                     cur.execute("select Account_Number from cd")
152                     dat2 = cur.fetchall()
153                     list_accno = []
154                     for i in dat2:
155                         for j in i:
156                             list_accno.append(j)
157                     while acc2 not in list_accno:
158                         print("\nAccount with this Account Number Does Not Exists.")
159                         print("Enter Again. or enter 0 to Cancel Transaction")
160                         acc2 = int(input("\nEnter Payee Account Number:- "))
161                         if acc2 == 0:
162                             break
163                     cur.execute(f"select Balance from cd where Customer_ID = '{cid}'")
164                     dat4 = cur.fetchall()
165                     while amt2 > dat4[0][0]:
166                         print("\nLow Balance In Your Account.")
167                         print("Enter Amount Again or enter 0 to Cancel Transaction.")
168                         amt2 = float(input("\nEnter Amount To Be Transferred:- "))
169                         if amt2 == 0:
170                             break
171
172                     cur.execute(f"""update cd set Balance = Balance +
173     {amt2} where Account_Number={acc2}""")
174
```

```
                cur.execute(f"""update cd set Balance = Balance -
{amt2} where Customer_ID='{cid}'""")

                cur.execute(f"""insert into trans values ('{cid}','{tridchk()}',
'{str(datetime.now())}',{amt2},'DEBIT')""")

                cur.execute(f"""select Customer_ID from cd where
Account_Number={acc2};""")
                dat6 = cur.fetchall()[0][0]
                cur.execute(f"""insert into trans values ('{dat6}','{tridchk()}',
'{str(datetime.now())}',{amt2},'CREDIT')""")
                cur.execute(f"""update cd set Balance =
Balance + {amt2/100} where Customer_ID='{cid}'""")

                time.sleep(1)

                cur.execute(f"""insert into trans values ('{cid}','{tridchk()}',
'{str(datetime.now())}',{amt2/100},'CREDIT')""")

                c.commit()
                print("\n")
                print(f"Your Online Transaction Is Successfull.")
                print(f"Amount: {amt2} is Transferred To Account Number: {acc2}")
                print(f"Yay! You have won a cashback of Rupees {amt2/100}\n")

        #option 3 in choice 2
        elif ch==3:
            cur.execute(f"""select * from trans where Customer_ID = '{cid}'
order by TimeStamp asc""")
            th = cur.fetchall()
            print("\n","*"*60,"\n")
            print("Transaction ID",end="\t\t")
            print("Date",end="\t\t")
            print("Time",end="\t\t")
            print("Amount",end="\t\t")
            print("Transaction Type")
            for i in th:
                print(i[1],end="\t\t")
                print(datetime.strftime(i[2],"%d-%m-%Y"),end="\t")
                print(str(i[2].time()),end="\t\t")
                print(i[3],end="\t\t")
                print(i[4],end="\t\t")
                print()
            print("\n","*"*60,"\n")

        #option 4 in choice 2
        elif ch==4:
            with open("Transaction_History.txt","w") as f:
                hd = ["S. No.","Transaction ID","Date","Time","Amount",
                    "Transaction Type"]
                for i in hd:
                    f.write(f"{i}\t\t")
                cur.execute(f"""select * from trans where
Customer_ID = '{cid}' order by TimeStamp asc""")
                th1 = cur.fetchall()
                j = 0
                for i in th1:
                    j = j + 1
```

```
                    f.write(f"\n{j}\t\t")
                    f.write(f"{i[1]}\t\t")
                    f.write(f"{datetime.strftime(i[2],'%d-%m-%Y')}\t")
                    f.write(f"{str(i[2].time())}\t\t")
                    f.write(f"{str(i[3])}\t\t")
                    f.write(f"{i[4].strip()}\n")
                print("File Downloaded Successfully.")
                print("File Name:- ",f.name)
                print("File Location:- ",os.getcwd())

        #option 5 in choice 2

        elif ch==5:
            mon1 = float(input("Enter Amount To Be Withdrawn From Account:- "))
            cur.execute(f"update cd set Balance = Balance - {mon1} where Customer_ID = '{cid}'")

            cur.execute(f"""insert into trans values
('{cid}','{tridchk()}','{str(datetime.now())}',{mon1},'DEBIT')""")

            print("""Amount Withdrawn Successfully.""")
            cur.execute(f"select Balance from cd where Customer_ID = '{cid}'")
            print(f"Updated Balance = {cur.fetchall()[0][0]}")
            c.commit()

        #option 6 in choice 2
        elif ch==6:
            cur.execute(f"select * from cd where Customer_ID='{cid}'")
            print("\nPlease Note Your Account Details Carefully And Don't Share It With Anyone.\n"
            print("\n","*"*60,"\n")

            d10=cur.fetchall()
            for i in d10:
                print("Customer ID:-" ,i[0])
                print("Account Name:-" ,i[1])
                print("Gender:-" ,i[2])
                print("Account Number:-" ,i[3])
                print("Account Type" ,i[4])
                print("Balance:-" ,i[6])
            print("\n","*"*60,"\n")

        elif ch==9:
            break
    except Exception as e:
        print(e)
        print("\nTry Again\n")
        continue

    else:
        while ch not in [1,2,3,4,5,6,9]:
            print("Invalid Input! Enter Again.")
            ch = int(input("Enter Your Choice:- "))

#choice 3
elif choice == 3:
    name = input("Enter Your Name:- ")
    cuid = input("Enter Your Customer ID:- ")
    acno = int(input("Enter Your Account Number:- "))
    pinnc = int(input("Enter Your Pin:- "))
```

```
        cur.execute(f"""select * from cd where Customer_ID = '{cuid}' and
Account_Number = {acno} and Name = '{name}' and Pin = {pinnc}""")
        data10 = cur.fetchall()
        if len(data10) != 0:
            cur.execute(f"""delete from cd where Customer_ID = '{cuid}' and
Account_Number = {acno} and Name = '{name}' and Pin = {pinnc}""")
            c.commit()
            print("Your Account Is Permanently Closed.")
        else:
            print("Wrong Entry. Try Again.")
    #choice 4
    elif choice == 4:

        c_id = input("Enter Your Customer ID:- ")
        pin1 = int(input("Enter Your Pin:- "))
        cur.execute(f"""select * from cd where
Customer_ID = '{c_id}' and Pin = {pin1}""")
        data2 = cur.fetchall()

        if len(data2) != 0:

            ap = """Enter    1 To Open Fixed Deposit
    2 To Close Fixed Deposit
    9 To Go back to main menu
    """
            print("\n","*"*60,"\n")
            print("\t\tTime Period",end="\t\t")
            print("Rate Of Interest",end="\n\t\t")
            print("Less Than 6 Months",end="\t\t")
            print("4.25%",end="\n\t\t")
            print("6 Months To 1 Year",end="\t\t")
            print("5%",end="\n\t\t")
            print("1 Year To Less Than 2 Years",end="\t\t")
            print("6.4%",end="\n\t\t")
            print("2 Years",end="\t\t\t\t")
            print("7%",end="\n\t\t")
            print("More Than 2 Years Upto 5 Years",end="\t")
            print("6.6%",end="\n\t\t")
            print("\n","*"*60,"\n")
            print(ap)

            uch = int(input("Enter Your Choice :- "))

            if uch == 1:
                pamt = float(input("Enter Principal Amount:- "))
                tmp = int(input("Enter Time Period [in no. of days] :- "))
                cur.execute(f"select Balance from cd where Customer_ID = '{c_id}'")
                dataf = cur.fetchall()
                while pamt>dataf[0][0]:
                    print("Insufficient Balance! Press 0 to Exit or modify Principal amount.")
                    pamt = float(input("Enter Principal Amount or 0 to Exit :- "))
                    if pamt == 0:
                        break
                while tmp > 1830:
                    print("Time Period is Greater than expected value. Enter Again or 0 to exit.")
                    tmp = int(input("Enter Time Period [in no. of days] :- "))
                    if tmp == 0:
                        break
```

```
                break
            if tmp<180:
                roi = 4.25
            elif 180<=tmp<=365:
                roi = 5
            elif 365<tmp<730:
                roi = 6.4
            elif tmp == 730:
                roi = 7
            else:
                roi = 6.6
            dtoday=str(date.today())
            fdno = "".join(random.choices(string.digits,k=8))
            mamt = (((roi/100)*pamt)/365) * tmp + pamt
            fdate = datetime.strptime(dtoday, "%Y-%m-%d") + timedelta(days=tmp)
            qf = f"""insert into fds values
('{c_id}','{fdno}','{dtoday}',{pamt},'{tmp}','{fdate}',{roi},{mamt})"""
            cur.execute(qf)
            cur.execute(f"""update cd set Balance =
Balance - {pamt} where Customer_ID = '{c_id}'""")

            cur.execute(f"""insert into trans values
('{c_id}','{tridchk()}','{str(datetime.now())}',{pamt},'DEBIT')""")
            c.commit()
            cur.execute(f"select * from fds where Customer_ID='{c_id}'")
            tp9 = cur.fetchall()[0]
            print("\nFD has been created successfully.\n")
            print("FD Number",tp9[1])

        elif uch == 2:
            print("FD's Associated With Given Customer ID are Below:- ")
            cur.execute(f"select * from fds where Customer_ID='{c_id}'")
            rec2 = cur.fetchall()
            for i in rec2:
                print(i,"\n")
            uin2 = int(input("Enter FD Number of the FD to be Closed:- "))
            fpin2 = int(input("Enter Your Pin To Continue:- "))
            cur.execute(f"""select * from cd where Customer_ID='{c_id}' and
                    Pin={fpin2}""")
            fdata2 = cur.fetchall()
            if len(fdata2) != 0:
                cur.execute(f"select * from fds where FD_Number={uin2}")
                fdata9 = cur.fetchall()
                dtoday1=str(date.today())
                fdate1 = datetime.strptime(dtoday1, "%Y-%m-%d") - datetime.strptime(str(fdata9[0][2]
                fdamt1 = (((fdata9[0][6]/100)*fdata9[0][3])/365) * fdate1.days + fdata9[0][3]
                cur.execute(f"""update cd set Balance=Balance+{fdamt1}
where Customer_ID='{c_id}'""")

                cur.execute(f"insert into trans values ('{c_id}','{tridchk()}','{str(datetime.now())}',{fdamt1},'
                cur.execute(f"delete from fds where FD_Number={uin2}")
                c.commit()
                print(f"\nFD with FD number {uin2} has been successfully closed.")
                print(f"The maturity amount of Rupees {fdamt1} has been successfully added to your ac
        elif uch == 9:
            break
        else:
            print("Invalid Input! Try Again.")
```

```
            uch = int(input("Enter Your Choice :- "))
    elif choice == 9:
        print("Thank You. Visit Again.")
        break
    else:
        while choice not in [1,2,3,4,9]:
            print("Invalid Input! Enter Again.")
            choice = int(input("Enter Your Choice:- "))
print("Thank You! Please Visit Again")
```

Python 3.9.0 Shell

File Edit Shell Debug Options Window Help

```
---------- Welcome To ABCBank ----------

Enter:
        1: To Create New Account
        2: To Login To Existing Account
        3: For Permanent Closure of Account
        4: For Opening or Closing of Fixed Deposit
        9: To Exit


Enter Your Choice:- 1
Enter Your Name:- Arjav
Gender [M / F] :- M
Enter Type of Account You want to open [SAVINGS / CURRENT] :- SAVINGS
Set Your Pin [4 Digit] :- 1234
Confirm Your Pin :- 1234

Account Created Successfully

Please Note Your Account Details Carefully And
            Don't Share It With Anyone.

 ************************************************************

Customer ID:- PJIW7928
Account Name:- Arjav
Gender:- M
Account Number:- 1210000085969117
Account Type SAVINGS
Balance:- 0.00

 ************************************************************


Enter:
        1: To Create New Account
        2: To Login To Existing Account
        3: For Permanent Closure of Account
        4: For Opening or Closing of Fixed Deposit
        9: To Exit


Enter Your Choice:- 2

Enter Your Customer ID :- PJIW7928
Enter Your Pin :- 1234

Welcome Arjav,

Enter:-
        1 To Add Money
        2 For Online Money Transfer
        3 To Display Transaction History
        4 To Download Transaction History
        5 To Withdraw Money
        6 To View Your Account Details
        9 To Go back to main menu
```

Ln: 264 Col: 4

```
Enter Your Choice:- 1
Enter Amount To Add In Account:- 10000

Amount Added Successfully.

Updated Balance = 10000.00

Enter Your Choice:- 2

Enter Payee Account Number:- 1210000085433397
Enter Amount To Be Transferred:- 2000
Enter Your Account Pin To ConfirmTransaction:- 1234


Your Online Transaction Is Successfull.
Amount: 2000.0 is Transferred To Account Number: 1210000085433397
Yay! You have won a cashback of Rupees 20.0


Enter Your Choice:- 3

 ************************************************************

Transaction ID          Date          Time          Amount          Transaction Type
615694813081            03-01-2023    22:43:53      10000.00        CREDIT

669374613772            03-01-2023    22:44:55      2000.00         DEBIT

264895107339            03-01-2023    22:44:56      20.00           CREDIT


 ************************************************************


Enter Your Choice:- 4
File Downloaded Successfully.
File Name:-  Transaction_History.txt
File Location:-  D:\CS-Project

Enter Your Choice:- 5
Enter Amount To Be Withdrawn From Account:- 1000
Amount Withdrawn Successfully.
Updated Balance = 7020.00

Enter Your Choice:- 6

Please Note Your Account Details Carefully And Don't Share It With Anyone.


 ************************************************************

Customer ID:- PJIW7928
Account Name:- Arjav
Gender:- M
Account Number:- 1210000085969117
Account Type SAVINGS
Balance:- 7020.00
```

File Edit Shell Debug Options Window Help

```
Enter Your Choice:- 7
Invalid Input! Enter Again.
Enter Your Choice:- 9

Enter Your Choice:- 9

Enter:
        1: To Create New Account
        2: To Login To Existing Account
        3: For Permanent Closure of Account
        4: For Opening or Closing of Fixed Deposit
        9: To Exit


Enter Your Choice:- 3
Enter Your Name:- Arjav
Enter Your Customer ID:- PJIW7928
Enter Your Account Number:- 1210000085969117
Enter Your Pin:- 1234
Your Account Is Permanently Closed.

Enter:
        1: To Create New Account
        2: To Login To Existing Account
        3: For Permanent Closure of Account
        4: For Opening or Closing of Fixed Deposit
        9: To Exit


Enter Your Choice:- 4
Enter Your Customer ID:- WWAR5917
Enter Your Pin:- 6000

 ************************************************************

                    Time Period                 Rate Of Interest
                    Less Than 6 Months              4.25%
                    6 Months To 1 Year              5%
                    1 Year To Less Than 2 Years     6.4%
                    2 Years                         7%
                    More Than 2 Years Upto 5 Years  6.6%

 ************************************************************

Enter    1 To Open Fixed Deposit
   2 To Close Fixed Deposit
   9 To Go back to main menu

Enter Your Choice :- 1
Enter Principal Amount:- 5000
Enter Time Period [in no. of days] :- 730

FD has been created successfully.

FD Number 99779480

Enter:
        1: To Create New Account
```

Ln: 264 Col

```
        2: To Login To Existing Account
        3: For Permanent Closure of Account
        4: For Opening or Closing of Fixed Deposit
        9: To Exit


Enter Your Choice:- 4
Enter Your Customer ID:- WWAR5917
Enter Your Pin:- 6000

 ************************************************************

                    Time Period                 Rate Of Interest
                    Less Than 6 Months              4.25%
                    6 Months To 1 Year              5%
                    1 Year To Less Than 2 Years     6.4%
                    2 Years                         7%
                    More Than 2 Years Upto 5 Years  6.6%

 ************************************************************

Enter    1 To Open Fixed Deposit
   2 To Close Fixed Deposit
   9 To Go back to main menu

Enter Your Choice :- 2
FD's Associated With Given Customer ID are Below:-
('WWAR5917', 99779480, datetime.date(2023, 1, 3), 5000, '730', datetime.date(2025, 1, 2), 7.0, 5700.0)

Enter FD Number of the FD to be Closed:- 99779480
Enter Your Pin To Continue:- 6000

FD with FD number 99779480 has been successfully closed.
The maturity amount of Rupees 5000.0 has been successfully added to your account.


Enter:
        1: To Create New Account
        2: To Login To Existing Account
        3: For Permanent Closure of Account
        4: For Opening or Closing of Fixed Deposit
        9: To Exit


Enter Your Choice:- 2

Enter Your Customer ID :- WWAR5917
Enter Your Pin :- 6000

Welcome Vishesh,

Enter:-
        1 To Add Money
        2 For Online Money Transfer
        3 To Display Transaction History
        4 To Download Transaction History
        5 To Withdraw Money
        6 To View Your Account Details
```

```
        9 To Go back to main menu

Enter Your Choice:- 3

 ************************************************************

Transaction ID          Date          Time        Amount      Transaction Type
039017679016            03-01-2023    22:44:55    2000.00     CREDIT

890173194004            03-01-2023    22:47:28    5000.00     DEBIT

109707937167            03-01-2023    22:48:16    5000.00     CREDIT


 ************************************************************


Enter Your Choice:- 9

Enter:
        1: To Create New Account
        2: To Login To Existing Account
        3: For Permanent Closure of Account
        4: For Opening or Closing of Fixed Deposit
        9: To Exit


Enter Your Choice:- 9
Thank You. Visit Again.
Thank You! Please Visit Again
>>>
```

Transaction_History - Notepad

File Edit Format View Help

```
S. No.          Transaction ID          Date          Time          Amount          Transaction Type
1               615694813081            03-01-2023    22:43:53              10000.00        CREDIT

2               669374613772            03-01-2023    22:44:55              2000.00         DEBIT

3               264895107339            03-01-2023    22:44:56              20.00           CREDIT
```

```
mysql> use abcbank;
Database changed
mysql> select * from cd;
+-------------+---------+--------+------------------+--------------+------+----------+
| Customer_ID | Name    | Gender | Account_Number   | Account_Type | Pin  | Balance  |
+-------------+---------+--------+------------------+--------------+------+----------+
| PJIW7928    | Arjav   | M      | 1210000085969117 | SAVINGS      | 1234 | 10000.00 |
| WWAR5917    | Vishesh | M      | 1210000085433397 | SAVINGS      | 6000 |  5000.00 |
+-------------+---------+--------+------------------+--------------+------+----------+
2 rows in set (0.00 sec)

mysql> select * from cd;
+-------------+---------+--------+------------------+--------------+------+---------+
| Customer_ID | Name    | Gender | Account_Number   | Account_Type | Pin  | Balance |
+-------------+---------+--------+------------------+--------------+------+---------+
| WWAR5917    | Vishesh | M      | 1210000085433397 | SAVINGS      | 6000 | 7000.00 |
+-------------+---------+--------+------------------+--------------+------+---------+
1 row in set (0.00 sec)

mysql>
```