

```

import mysql.connector

mydb=mysql.connector.connect(user='root',
                             passwd='root123',
                             host='localhost',
                             auth_plugin='mysql_native_password',
                             database='BankDB'
                             )

mycursor=mydb.cursor(buffered=True)
#Created Database BankDB
#mycursor.execute('create database BankDB')

def Menu():          #Function to display the menu
    print("***140)
    print("MAIN MENU".center(140))
    print("1. Insert Record/Records".center(140))
    print("2. Display Records as per Account Number".center(140))
    print("    a. Sorted as per Account Number".center(140))
    print("    b. Sorted as per Customer Name".center(140))
    print("    c. Sorted as per Customer Balance".center(140))
    print("3. Search Record Details as per the account
number".center(140))
    print("4. Update Record".center(140))
    print("5. Delete Record".center(140))
    print("6. TransactionsDebit/Withdraw from the
account".center(140))
    print("    a. Debit/Withdraw from the account".center(140))
    print("    b. Credit into the account".center(140))
    print("7. Exit".center(140))
    print("***140)

def MenuSort():
    print("    a. Sorted as per Account Number".center(140))
    print("    b. Sorted as per Customer Name".center(140))
    print("    c. Sorted as per Customer Balance".center(140))
    print("    d. Back".center(140))

def MenuTransaction():

```

```

        print("    a. Debit/Withdraw from the account".center(140))
        print("    b. Credit into the account".center(140))
        print("    c. Back".center(140))
def Create():
    try:
        mycursor.execute('create table bank(ACCNO varchar(10),NAME
varchar(20),MOBILE varchar(10),EMAIL varchar(20),ADDRESS
varchar(20),CITY varchar(10),COUNTRY varchar(20),BALANCE
integer(15))')
        print("Table Created")
        Insert()
    except:
        print("Table Exist")
        Insert()

def Insert():

    while True:          #Loop for accepting records
        Acc=input("Enter account no")
        Name=input("Enter Name")
        Mob=input("Enter Mobile")
        email=input("Enter Email")
        Add=input("Enter Address")
        City=input("Enter City")
        Country=input("Enter Country")
        Bal=float(input("Enter Balance"))

Rec=[Acc,Name.upper(),Mob,email.upper(),Add.upper(),City.upper(),Coun
try.upper(),Bal]
        Cmd="insert into BANK values(%s,%s,%s,%s,%s,%s,%s,%s)"
        mycursor.execute(Cmd,Rec)
        mydb.commit()
        ch=input("Do you want to enter more records")
        if ch=='N' or ch=='n':
            break

def DispSortAcc():      #Function to Display records as per
ascending order of Account Number
    try:
        cmd="select * from BANK order by ACCNO"
        mycursor.execute(cmd)
        S=mycursor.fetchall()

```

```

        F="%15s %15s %15s %15s %15s %15s %15s %15s"
        print(F % ("ACCNO", "NAME", "MOBILE", "EMAIL ADDRESS", "COMPLETE
ADDRESS", "CITY", "COUNTRY", "BALANCE"))
        print("="*125)
        for i in S:
            for j in i:
                print("%14s" % j, end=' ')
            print()
        print("="*125)
    except:
        print("Table doesn't exist")

```

```

def DispSortName():          #Function to Display records as per
ascending order of Name
    try:
        cmd="select * from BANK order by NAME"
        mycursor.execute(cmd)
        S=mycursor.fetchall()
        F="%15s %15s %15s %15s %15s %15s %15s %15s"
        print(F % ("ACCNO", "NAME", "MOBILE", "EMAIL ADDRESS", "COMPLETE
ADDRESS", "CITY", "COUNTRY", "BALANCE"))
        print("="*125)
        for i in S:
            for j in i:
                print("%14s" % j, end=' ')
            print()
        print("="*125)
    except:
        print("Table doesn't exist")

```

```

def DispSortBal():          #Function to Display records as per
ascending order of Balance
    try:
        cmd="select * from BANK order by BALANCE"
        mycursor.execute(cmd)
        S=mycursor.fetchall()
        F="%15s %15s %15s %15s %15s %15s %15s %15s"
        print(F % ("ACCNO", "NAME", "MOBILE", "EMAIL ADDRESS", "COMPLETE
ADDRESS", "CITY", "COUNTRY", "BALANCE"))
        print("="*125)
        for i in S:
            for j in i:
                print("%14s" % j, end=' ')

```

```

        print()
        print("="*125)
except:
    print("Table doesn't exist")

def DispSearchAcc(): #Function to Search for the Record from the File
with respect to the account number
    try:
        cmd="select * from BANK"
        mycursor.execute(cmd)
        S=mycursor.fetchall()
        ch=input("Enter the accountno to be searched")
        for i in S:

            if i[0]==ch:
                print("="*125)
                F="%15s %15s %15s %15s %15s %15s %15s %15s"
                print(F % ("ACCNO","NAME","MOBILE","EMAIL
ADDRESS","COMPLETE ADDRESS","CITY","COUNTRY","BALANCE"))
                print("="*125)
                for j in i:
                    print('%14s' % j,end=' ')
                print()
                break
            else:
                print("Record Not found")
except:
    print("Table doesn't exist")

def Update(): #Function to change the details of a customer
    try:
        cmd="select * from BANK"
        mycursor.execute(cmd)
        S=mycursor.fetchall()
        A=input("Enter the account no whose details to be changed")
        for i in S:
            i=list(i)
            if i[0]==A:
                ch=input("Change Name(Y/N) ")
                if ch=='y' or ch=='Y':
                    i[1]=input("Enter Name")
                    i[1]=i[1].upper()

```

```

        ch=input("Change Mobile(Y/N) ")
        if ch=='y' or ch=='Y':
            i[2]=input("Enter Mobile")

        ch=input("Change Email(Y/N) ")
        if ch=='y' or ch=='Y':
            i[3]=input("Enter email")
            i[3]=i[3].upper()

        ch=input("Change Address(Y/N) ")
        if ch=='y' or ch=='Y':
            i[4]=input("Enter Address")
            i[4]=i[4].upper()

        ch=input("Change city(Y/N) ")
        if ch=='y' or ch=='Y':
            i[5]=input("Enter City")
            i[5]=i[5].upper()

        ch=input("Change Country(Y/N) ")
        if ch=='y' or ch=='Y':
            i[6]=input("Enter country")
            i[6]=i[6].upper()

        ch=input("Change Balance(Y/N) ")
        if ch=='y' or ch=='Y':
            i[7]=float(input("Enter Balance"))
            cmd="UPDATE BANK SET
NAME=%s,MOBILE=%s,EMAIL=%s,ADDRESS=%s,CITY=%s,COUNTRY=%s,BALANCE=%s
WHERE ACCNO=%s"
            val=(i[1],i[2],i[3],i[4],i[5],i[6],i[7],i[0])
            mycursor.execute(cmd,val)
            mydb.commit()
            print("Account Updated")
            break
    else:
        print("Record not found")
except:
    print("No such table")

def Delete(): #Function to delete the details of a customer

```

```

try:
    cmd="select * from BANK"
    mycursor.execute(cmd)
    S=mycursor.fetchall()
    A=input("Enter the account no whose details to be changed")
    for i in S:
        i=list(i)
        if i[0]==A:
            cmd="delete from bank where accno=%s"
            val=(i[0],)
            mycursor.execute(cmd,val)
            mydb.commit()
            print("Account Deleted")
            break
        else:
            print("Record not found")
except:
    print("No such Table")

```

```

def Debit(): #Function to Withdraw the amount by assuring the min
balance of Rs 5000
    try:
        cmd="select * from BANK"
        mycursor.execute(cmd)
        S=mycursor.fetchall()
        print("Please Note that the money can only be debited if
min balance of Rs 5000 exists")
        acc=input("Enter the account no from which the money is
to be debited")
        for i in S:
            i=list(i)
            if i[0]==acc:
                Amt=float(input("Enter the amount to be
withdrawn"))
                if i[7]-Amt>=5000:
                    i[7]-=Amt
                    cmd="UPDATE BANK SET BALANCE=%s WHERE
ACCNO=%s"
                    val=(i[7],i[0])
                    mycursor.execute(cmd,val)
                    mydb.commit()
                    print("Amount Debited")

```

```

        break
    else:
        print("There must be min balance of Rs 5000")
        break

    else:
        print("Record Not found")

except:
    print("Table Doesn't exist")

def Credit(): #Function to Withdraw the amount by assuring the min
balance of Rs 5000
    try:
        cmd="select * from BANK"
        mycursor.execute(cmd)
        S=mycursor.fetchall()
        acc=input("Enter the account no from which the money is
to be debited")
        for i in S:
            i=list(i)
            if i[0]==acc:
                Amt=float(input("Enter the amount to be
credited"))

                i[7]+=Amt
                cmd="UPDATE BANK SET BALANCE=%s WHERE ACCNO=%s"
                val=(i[7],i[0])
                mycursor.execute(cmd,val)
                mydb.commit()
                print("Amount Credited")
                break

        else:
            print("Record Not found")

    except:
        print("Table Doesn't exist")

while True:
    Menu()
    ch=input("Enter your Choice")

```

```

if ch=="1":
    Create()
elif ch=="2":
    while True:
        MenuSort()
        ch1=input("Enter choice a/b/c/d")
        if ch1 in ['a','A']:
            DispSortAcc()
        elif ch1 in ['b','B']:
            DispSortName()
        elif ch1 in ['c','C']:
            DispSortBal()
        elif ch1 in ['d','D']:
            print("Back to the main menu")
            break
        else:
            print("Invalid choice")
elif ch=="3":
    DispSearchAcc()
elif ch=="4":
    Update()
elif ch=="5":
    Delete()
elif ch=="6":
    while True:
        MenuTransaction()
        ch1=input("Enter choice a/b/c")
        if ch1 in ['a','A']:
            Debit()
        elif ch1 in ['b','B']:
            Credit()
        elif ch1 in ['c','C']:
            print("Back to the main menu")
            break
        else:
            print("Invalid choice")
elif ch=="7":
    print("Exiting...")
    break
else:
    print("Wrong Choice Entered")

```


