# *BANK MANAGEMENT SYSTEM*


In [ ]:

### MySQL.connector is used to make a connection between Python and MySQL

- pip install mysql.connector

The whole code is divided into user-defined Python functions. These functions have been called from the main menu to generate the initial menu system.

In [1]:

```
import mysql.connector
from datetime import date

def clear():
  for _ in range(15):
     print()


def account_status(acno):
  conn = mysql.connector.connect(
      host='localhost', database='bankingsystem', user='root', password='qwerty')
  cursor = conn.cursor()
  sql ="select status,balance from customer where acno ='"+acno+"'"
  result = cursor.execute(sql)
  result = cursor.fetchone()
  conn.commit()
  conn.close()
  return result

def deposit_amount():
    conn = mysql.connector.connect(
        host='localhost', database='bankingsystem', user='root', password='qwerty')
    cursor = conn.cursor()
    clear()
    acno = input('Enter account No :')
    amount = input('Enter amount :')
    today = date.today()
    result = account_status(acno)
    if result [0]== 'active':
      sql1 ="update customer set balance = balance+"+amount + ' where acno = '+acno+' and status="active";'
      sql2 = 'insert into transaction(amount,type,acno,dot) values(' + amount +',"deposit",'+acno+',"'+str(today
      cursor.execute(sql2)
      cursor.execute(sql1)
      conn.commit()
      #print(sql1)
      #print(sql2)
      print('\n\namount deposited')

    else:
      print('\n\nClosed or Suspended Account....')

    wait= input('\n\n\n Press any key to continue....')
```

```
    conn.close()


def withdraw_amount():
    conn = mysql.connector.connect(
        host='localhost', database='bankingsystem', user='root', password='qwerty')
    cursor = conn.cursor()
    clear()
    acno = input('Enter account No :')
    amount = input('Enter amount :')
    today = date.today()
    result = account_status(acno)
    if result[0] == 'active' and int(result[1])>=int(amount):
      sql1 = "update customer set balance = balance-" + \
          amount + ' where acno = '+acno+' and status="active";'
      sql2 = 'insert into transaction(amount,type,acno,dot) values(' + \
          amount + ',"withdraw",'+acno+',"'+str(today)+'");'

      cursor.execute(sql2)
      cursor.execute(sql1)
      conn.commit()
      #print(sql1)
      #print(sql2)
      print('\n\namount Withdrawn')

    else:
      print('\n\nClosed or Suspended Account.Or Insufficient amount')

    wait = input('\n\n\n Press any key to continue....')
    conn.close()

def transaction_menu():
    while True:
      clear()
      print(' Trasaction Menu')
      print("\n1.  Deposit Amount")
      print('\n2.  WithDraw Amount')
      print('\n3.  Back to Main Menu')
      print('\n\n')
      choice = int(input('Enter your choice ...: '))
      if choice == 1:
        deposit_amount()
      if choice == 2:
```

```
        withdraw_amount()
      if choice == 3:
        break

def search_menu():
    conn = mysql.connector.connect(
       host='localhost', database='bankingsystem', user='root', password='qwerty')
    cursor = conn.cursor()
    while True:
      clear()
      print(' Search Menu')
      print("\n1.  Account No")
      print('\n2.  Aadhar Card')
      print('\n3.  Phone No')
      print('\n4.  Email')
      print('\n5.  Names')
      print('\n6.  Back to Main Menu')
      choice = int(input('Enter your choice ...: '))
      field_name=''

      if choice == 1:
        field_name ='acno'

      if choice == 2:
        field_name ='aadhar_no'

      if choice == 3:
        field_name = 'phone'

      if choice == 4:
        field_name = 'email'

      if choice == 5:
        field_name = 'name'

      if choice == 6:
        break
      msg ='Enter '+field_name+': '
      value = input(msg)
      if field_name=='acno':
        sql = 'select * from customer where '+field_name + ' = '+value+';'
      else:
        sql = 'select * from customer where '+field_name +' like "%'+value+'%";'
```

```
      #print(sql)
      cursor.execute(sql)
      records = cursor.fetchall()
      n = len(records)
      clear()
      print('Search Result for ', field_name, ' ',value)
      print('-'*80)
      for record in records:
       print(record[0], record[1], record[2], record[3],
             record[4], record[5], record[6], record[7], record[8])
      if(n <= 0):
        print(field_name, ' ', value, ' does not exist')
      wait = input('\n\n\n Press any key to continue....')
    conn.commit()
    conn.close()
    wait=input('\n\n\n Press any key to continue....')

def daily_report():
   clear()

   conn = mysql.connector.connect(
       host='localhost', database='bankingsystem', user='root', password='qwerty')
   today = date.today()
   cursor = conn.cursor()
   sql = 'select tid,dot,amount,type,acno from transaction t where dot="'+ str(today)+'";'
   cursor.execute(sql)
   records = cursor.fetchall()
   clear()
   print('Daily Report :',today)
   print('-'*120)
   for record in records:
       print(record[0], record[1], record[2], record[3], record[4])
   print('-'*120)
   conn.commit()
   conn.close()
   wait = input('\n\n\n Press any key to continue....')


def monthly_report():
   clear()

   conn = mysql.connector.connect(
       host='localhost', database='bankingsystem', user='root', password='qwerty')
```

```
    today = date.today()
    cursor = conn.cursor()
    sql = 'select tid,dot,amount,type,acno from transaction t where month(dot)="' + \
        str(today).split('-')[1]+'";'
    cursor.execute(sql)
    records = cursor.fetchall()
    clear()
    print(sql)
    print('Monthly Report :', str(today).split(
        '-')[1], '-,', str(today).split('-')[0])
    print('-'*120)
    for record in records:
        print(record[0], record[1], record[2], record[3], record[4])
    print('-'*120)
    conn.commit()
    conn.close()
    wait = input('\n\n\n Press any key to continue....')

def account_details():
    clear()
    acno = input('Enter account no :')
    conn = mysql.connector.connect(
        host='localhost', database='bankingsystem', user='root', password='qwerty')
    cursor = conn.cursor()
    sql ='select * from customer where acno ='+acno+';'
    sql1 = 'select tid,dot,amount,type from transaction t where t.acno='+acno+';'
    cursor.execute(sql)
    result = cursor.fetchone()
    clear()
    print('Account Details')
    print('-'*120)
    print('Account No :',result[0])
    print('Customer Name :',result[1])
    print('Address :',result[2])
    print('Phone NO :',result[3])
    print('Email ID :',result[4])
    print('Aadhar No :',result[5])
    print('Account Type :',result[6])
    print('Account Status :',result[7])
    print('Current Balance :',result[8])
    print('-'*120)
    cursor.execute(sql1)
    results = cursor.fetchall()
```

```
    for result in results:
        print(result[0], result[1], result[2], result[3])
    conn.commit()
    conn.close()
    wait=input('\n\n\nPress any key to continue.....')

def report_menu():
    while True:
      clear()
      print(' Report Menu')
      print("\n1.  Daily Report")
      print('\n2.  Monthly Report')
      print('\n3.  Account Details')
      print('\n4.  Back to Main Menu')
      choice = int(input('Enter your choice ...: '))
      if choice == 1:
        daily_report()
      if choice == 2:
        monthly_report()
      if choice == 3:
        account_details()
      if choice == 4:
        break

def add_account():
    conn = mysql.connector.connect(
        host='localhost', database='bankingsystem', user='root', password='qwerty')
    cursor = conn.cursor()

    name = input('Enter Name :')
    addr = input('Enter address ')
    phone = input('Enter Phone no :')
    email = input('Enter Email :')
    aadhar = input('Enter AAdhar no :')
    actype = input('Account Type (saving/current ) :')
    balance = input('Enter opening balance :')
    sql = 'insert into customer(name,address,phone,email,aadhar_no,acc_type,balance,status) values ( "' + name +
    cursor.execute(sql)
    conn.commit()
    conn.close()
    print('New customer added successfully')
```

```
def modify_account():
    conn = mysql.connector.connect(
        host='localhost', database='bankingsystem', user='root', password='qwerty')
    cursor = conn.cursor()
    clear()
    acno = input('Enter customer Account No :')
    print('Modify screen ')
    print('\n 1.  Customer Name')
    print('\n 2.  Customer Address')
    print('\n 3.  Customer Phone No')
    print('\n 4.  Customer Email ID')
    choice = int(input('What do you want to change ? '))
    new_data  = input('Enter New value :')
    field_name=''
    if choice == 1:
       field_name ='name'
    if choice == 2:
       field_name = 'address'
    if choice == 3:
       field_name = 'phone'
    if choice == 4:
       field_name = 'email'
    sql ='update customer set ' + field_name + '="'+ new_data +'" where acno='+acno+';'
    print(sql)
    cursor.execute(sql)
    conn.commit()
    print('Customer Information modified..')


def close_account():
    conn = mysql.connector.connect(
        host='localhost', database='bankingsystem', user='root', password='qwerty')
    cursor = conn.cursor()
    clear()
    acno = input('Enter customer Account No :')
    sql ='update customer set status="close" where acno ='+acno+';'
    cursor.execute(sql)
    conn.commit()
    print('Account closed')

def main_menu():
    while True:
      clear()
```

```
      print(' Main Menu')
      print("\n1.  Add Account")
      print('\n2.  Modify Account')
      print('\n3.  Close Account')
      print('\n4.  Transactio Menu')
      print('\n5.  Search Menu')
      print('\n6.  Report Menu')
      print('\n7.  Close application')
      print('\n\n')
      choice = int(input('Enter your choice ...: '))
      if choice == 1:
        add_account()
      if choice == 2:
        modify_account()
      if choice == 3:
        close_account()
      if choice ==4 :
        transaction_menu()
      if choice ==5 :
        search_menu()
      if choice == 6:
        report_menu()
      if choice ==7 :
        break
main_menu()
```

```
 Main Menu

1.  Add Account

2.  Modify Account

3.  Close Account

4.  Transactio Menu

5.  Search Menu

6.  Report Menu

7.  Close application



Enter your choice ...: 1
Enter Name :SAIKRISHNA
Enter address 1-109
Enter Phone no :7337298330
Enter Email :saikrishna@gmail.com
Enter AAdhar no :794389843289080
Account Type (saving/current ) :saving
Enter opening balance :5999
New customer added successfully
```

```
 Main Menu

1.  Add Account

2.  Modify Account

3.  Close Account

4.  Transactio Menu

5.  Search Menu

6.  Report Menu

7.  Close application


Enter your choice ...: 6
```

```
 Report Menu

1.  Daily Report

2.  Monthly Report

3.  Account Details

4.  Back to Main Menu
```

```
Enter your choice ...: 3



Enter account no :4



Account Details
-------------------------------------------------------------------------------------------------------
----------
Account No : 4
Customer Name : rajesh
Address : vizag
Phone NO : 7303392760
Email ID : rajesh99@gmail.com
Aadhar No : 7897-7934-9533
Account Type : saving
Account Status : active
```

```
Current Balance : 78000.0
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Press any key to continue.....









 Report Menu

1.  Daily Report

2.  Monthly Report

3.  Account Details

4.  Back to Main Menu
Enter your choice ...: 4
```

```
 Main Menu

1.  Add Account

2.  Modify Account

3.  Close Account

4.  Transactio Menu

5.  Search Menu

6.  Report Menu

7.  Close application


Enter your choice ...: 7
```