NAME: AKSHAYAA.D   **COURSE**: PYTHON   **BATCH TIME**: 6.00 P.M. TO 7.00 P.M.

PROJECT TITLE: PERSONAL ADDRESS BOOK

CREATE A CRUD PROJECT USING CORE PYTHON AND MYSQL TO GENERATE PERSONAL ADDRESS BOOK

INTRODUCTION:

Address book is a simple project that allows a user to store and manage contact information, such as names, phone numbers, addresses, etc. I developed this project using PYTHON and MYSQL by creating database and table to store the data.

In Python, you can use a variety of libraries and techniques to create an address book. One common approach is to use a text-based user interface (TUI) to show the contacts and accept the user's input. This can be accomplished using the built-in **input ()** function to prompt the user for their input, and the **print ()** function to display the contacts and other information to the user.

FEATURES:

- ➢ Users can search contact in address book.
- ➢ Users can add contact in address book.
- ➢ Users can view all contacts in address book.
- ➢ Users can edit contact in address book.
- ➢ Users can delete contact in address book.
- ➢ Users can delete all contacts in address book.

PACKAGES USED:

- ➢ Pymysql – This package contains a pure-Python MYSQL client library.
- ➢ Tabulate – This package is used to create tables.

FILES USED:

- ➢ Address Book.py
- ➢ Sql query.sql

HOW TO RUN THE ADDRESS BOOK PROGRAM?

➢ To run the Python MySQL quiz program in the command prompt, you will need to have python and mysql-connector-python/pymysql library installed on your system.

➢ You can check if you have these installed by running the following commands in the command prompt:

- python --version
- pip list

➢ You should see the version of Python that is currently installed, and the list of libraries that are available to your Python installation. If mysql-connector-python/pymysql is not in the list, you can install it using pip by running the following command:

- pip install mysql-connector-python

➢ Once you have Python and the mysql-connector-python/pymysql library installed, you can run the quiz program by navigating to the directory where the program is saved, and then entering the command:

- python Address Book.py

➢ This will start the program, which will connect to the MySQL database, retrieve the contacts.

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1. SEARCH CONTACTS:

You can Search contacts by using name or phone number or city.

```
What do you want to do?
1.Search Contact
2.View all contacts
3.Add contact
4.Edit contact
5.Delete contact
6.Delete all contacts
7.Close
Enter the choice number : 1
Search name/phone number/city : amma
```

Name	Phone Number	City
Amma	9750631751	Trichy

```
----------------------X----------------------
What do you want to do?
1.Search Contact
2.View all contacts
3.Add contact
4.Edit contact
5.Delete contact
6.Delete all contacts
7.Close
Enter the choice number : 1
Search name/phone number/city : s
```

Name	Phone Number	City
Aalish	7892345012	Thanjavur
Vishwanath	9923476450	Trichy
Elakiya	8901736439	Salem

```
----------------------X----------------------
```

```
What do you want to do?
1.Search Contact
2.View all contacts
3.Add contact
4.Edit contact
5.Delete contact
6.Delete all contacts
7.Close
Enter the choice number : 1
Search name/phone number/city : 97
```

Name	Phone Number	City
Amma	9750631751	Trichy
Anna	9715137030	Chennai

```
----------------------X----------------------
What do you want to do?
1.Search Contact
2.View all contacts
3.Add contact
4.Edit contact
5.Delete contact
6.Delete all contacts
7.Close
Enter the choice number : 1
Search name/phone number/city : 6450
```

Name	Phone Number	City
Vishwanath	9923476450	Trichy

```
----------------------X----------------------
```

```
What do you want to do?
1.Search Contact
2.View all contacts
3.Add contact
4.Edit contact
5.Delete contact
6.Delete all contacts
7.Close
Enter the choice number : 1
Search name/phone number/city : trichy
```

Name	Phone Number	City
Amma	9750631751	Trichy
Daddy	7903441336	Trichy
Vishwanath	9923476450	Trichy

```
What do you want to do?
1.Search Contact
2.View all contacts
3.Add contact
4.Edit contact
5.Delete contact
6.Delete all contacts
7.Close
Enter the choice number : 1
Search name/phone number/city : chen
```

Name	Phone Number	City
Anna	9715137030	Chennai
Nayeem	8901267832	Chennai

2. VIEW ALL CONTACTS

```
What do you want to do?
1.Search Contact
2.View all contacts
3.Add contact
4.Edit contact
5.Delete contact
6.Delete all contacts
7.Close
Enter the choice number : 2
```

Name	Phone Number	City
Amma	9750631751	Trichy
Anna	9715137030	Chennai
Daddy	7903441336	Trichy
Aalish	7892345012	Thanjavur
Nayeem	8901267832	Chennai
Balaji	9208153903	Thanjavur
Harini	8529078654	Pudukottai
Vishwanath	9923476450	Trichy
Elakiya	8901736439	Salem
Charu	7890014572	Mumbai

3. ADD CONTACTS:

```
What do you want to do?
1.Search Contact
2.View all contacts
3.Add contact
4.Edit contact
5.Delete contact
6.Delete all contacts
7.Close
Enter the choice number : 3
Enter the name : Aakash
Enter the phone : 98340725916
Enter the city : Villupuram
-----------------------X-----------------------
What do you want to do?
1.Search Contact
2.View all contacts
3.Add contact
4.Edit contact
5.Delete contact
6.Delete all contacts
7.Close
Enter the choice number : 3
Enter the name : Basha
Enter the phone : 8609236724
Enter the city : Coimbatore
-----------------------X-----------------------
```

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4. EDIT CONTACTS:

You can edit name, phone number and city.

```
What do you want to do?
1.Search Contact
2.View all contacts
3.Add contact
4.Edit contact
5.Delete contact
6.Delete all contacts
7.Close
Enter the choice number : 4
Enter the name you want to edit : charu
What do you want to edit?
1.Name
2.Phone number
3.City
Enter the choice number : 1
Enter the name : Charuprabha
----------------------x----------------------
```

```
What do you want to do?
1.Search Contact
2.View all contacts
3.Add contact
4.Edit contact
5.Delete contact
6.Delete all contacts
7.Close
Enter the choice number : 4
Enter the name you want to edit : nayeem
What do you want to edit?
1.Name
2.Phone number
3.City
Enter the choice number : 2
Enter the phone number : 7934633401
----------------------x----------------------
```

```
What do you want to do?
1.Search Contact
2.View all contacts
3.Add contact
4.Edit contact
5.Delete contact
6.Delete all contacts
7.Close
Enter the choice number : 4
Enter the name you want to edit : charuprabha
What do you want to edit?
1.Name
2.Phone number
3.City
Enter the choice number : 3
Enter the city : Srirangam
----------------------x----------------------
```

5. DELETE CONTACTS:

```
What do you want to do?
1.Search Contact
2.View all contacts
3.Add contact
4.Edit contact
5.Delete contact
6.Delete all contacts
7.Close
Enter the choice number : 5
Enter the name you want to delete : harini
Are you sure you want to delete this contact?
1.Yes    2.No
Enter the choice number : 1
Deleted this contact successfully
-----------------------X-----------------------
```

6. DELETE ALL CONTACTS:

```
What do you want to do?
1.Search Contact
2.View all contacts
3.Add contact
4.Edit contact
5.Delete contact
6.Delete all contacts
7.Close
Enter the choice number : 6
Are you sure you want to delete all contacts?
1.Yes    2.No
Enter the choice number : 1
Deleted all contacts successfully
----------------------X----------------------
What do you want to do?
1.Search Contact
2.View all contacts
3.Add contact
4.Edit contact
5.Delete contact
6.Delete all contacts
7.Close
Enter the choice number : 2

  Name       Phone Number    City


----------------------X----------------------
```

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7. CLOSE:

```
What do you want to do?
1.Search Contact
2.View all contacts
3.Add contact
4.Edit contact
5.Delete contact
6.Delete all contacts
7.Close
Enter the choice number : 7
Address Book Closed
```

FINAL DATA AFTER IMPLEMENTING FUNCTIONS:

```
What do you want to do?
1.Search Contact
2.View all contacts
3.Add contact
4.Edit contact
5.Delete contact
6.Delete all contacts
7.Close
Enter the choice number : 2
```

Name	Phone Number	City
Amma	9750631751	Trichy
Anna	9715137030	Chennai
Daddy	7903441336	Trichy
Aalish	7892345012	Thanjavur
Nayeem	7934633401	Chennai
Balaji	9208153903	Thanjavur
Vishwanath	9923476450	Trichy
Elakiya	8901736439	Salem
Charuprabha	7890014572	Srirangam
Aakash	98340725916	Villupuram
Basha	8609236724	Coimbatore

```
----------------------X----------------------
```

CONCLUSION:

Successfully developed the Address book using PYTHON and MYSQL.

Source Code:

Python code

```python
# Personal Address Book


import pymysql

from tabulate import tabulate


try:

    connection = pymysql.connect(host="localhost", user="root", password='', db="addressbook")

    cursor = connection.cursor()



    headers = ["Name", "Phone Number", "City"]



    # Functions

    def search():

        info = input("Search name/phone number/city : ")

        cmd = "select * from contactlist where namelist like '%"+info + "%' or phone like '%"+info+"%'

                or city like '%"+info+"%'"

        cursor.execute(cmd)

        data = cursor.fetchall()

        if len(data) > 0:

            print(tabulate(data, headers, tablefmt="fancy_grid",numalign="center", stralign="center"))

        else:

            print("Given data not found in the address book")

        print("----------------------x---------------------")
```

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```python
def viewall():

    cmd = "select * from contactlist"

    cursor.execute(cmd)

    data = cursor.fetchall()

    print(tabulate(data, headers, tablefmt="fancy_grid",numalign="center", stralign="center"))

    print("--------------------x--------------------")


def add():

    name = input("Enter the name : ")

    phone = int(input("Enter the phone : "))

    city = input("Enter the city : ")

    column = (name, phone, city)

    cmd = "insert into contactlist values(%s,%s,%s)"

    cursor.execute(cmd, column)

    print("--------------------x--------------------")


def edit():

    editname = input("Enter the name you want to edit : ")

    cmd = "select * from contactlist where namelist='%s'" % (editname)

    cursor.execute(cmd)

    if cursor.fetchone():

        print("What do you want to edit?")

        print("1.Name \n2.Phone number \n3.City")

        ch = int(input("Enter the choice number : "))

        if ch == 1:

            name = input("Enter the name : ")
```

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```python
        cmd = "update contactlist set namelist='%s'where namelist='%s'" % (name, editname)

        cursor.execute(cmd)

     elif ch == 2:

        phone = int(input("Enter the phone number : "))

        cmd = "update contactlist set phone='%d'where namelist='%s'" % (phone, editname)

        cursor.execute(cmd)

     elif ch == 3:

        city = input("Enter the city : ")

        cmd = "update contactlist set city='%s'where namelist='%s'" % (city, editname)

        cursor.execute(cmd)

     else:

        print("Choice number is incorrect")

  else:

     print("Name Not Found")

  print("--------------------x---------------------")


def delcontact():

  name = input("Enter the name you want to delete : ")

  cmd = "select * from contactlist where namelist='%s'" % (name)

  cursor.execute(cmd)

  if cursor.fetchone():

     print("Are you sure you want to delete this contact?")

     print("1.Yes\t2.No")

     confirmation = int(input("Enter the choice number : "))

     if (confirmation == 1):

        cmd = "delete from contactlist where namelist='%s'" % (name)
```

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```python
        cursor.execute(cmd)

        print("Deleted this contact successfully")

    else:

      print("Name Not Found")

    print("--------------------x--------------------")


  def deleteall():

    print("Are you sure you want to delete all contacts?")

    print("1.Yes\t2.No")

    confirmation = int(input("Enter the choice number : "))

    if (confirmation == 1):

      cmd = "truncate table contactlist"

      cursor.execute(cmd)

      print("Deleted all contacts successfully")

      print("--------------------x--------------------")


  while True:

    print("What do you want to do?")

    print("1.Search Contact \n2.View all contacts \n3.Add contact \n4.Edit contact \n

        5.Delete contact \n6.Delete all contacts \n7.Close")

    choice = int(input("Enter the choice number : "))


    if choice == 1:

      search()

    elif choice == 2:

      viewall()
```

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```
        elif choice == 3:

            add()

        elif choice == 4:

            edit()

        elif choice == 5:

            delcontact()

        elif choice == 6:

            deleteall()

        else:

            print("Address Book Closed")

            break


    connection.commit()

    connection.close()


except (Exception) as ex:

    print(ex.__class__, ex.args)

    print("Oops! Something went wrong")
```

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Mysql query

```
#Personal Address Book

create database AddressBook;

use AddressBook;

create table contactlist(namelist varchar(20) not null,phone bigint not null,city varchar(20));

insert into contactlist values("Amma",9750631751,"Trichy"),("Anna",9715137030,"Chennai"),

("Daddy",7903441336,"Trichy"),("Aalish",7892345012,"Thanjavur"),

("Nayeem",8901267832,"Chennai"),("Balaji",9208153903,"Thanjavur"),

("Harini",8529078654,"Pudukottai"),("Vishwanath",9923476450,"Trichy"),

("Elakiya",8901736439,"Salem"),("Charu",7890014572,"Mumbai");

desc contactlist;

select * from contactlist;
```