Assignment -2
Python Programming

Assignment Date	24/09/22
Student Name	Senthamizh Selvan.M
Student Roll Number	512219104701
Maximum Marks	2 Marks

Question-1:

1. Create a User table with Username, email, roll number, password

2. Perform UPDATE and DELETE queries

3. Connect python code to database

4. Create Flask app for a User registration and User login

Solution:

App.py

```python
from flask import Flask, render_template, request, redirect
import sqlite3 as sql
import models as dbHandler


app = Flask(__name__)
app.secret_key = 'fasdgfdgdfg'


@app.route('/')
def home():
    return render_template('home.html')

@app.route('/adduser')
def new_user():
    return render_template('add_user.html')

@app.route('/addrec',methods = ['POST', 'GET'])
def addrec():
    if request.method == 'POST':
        try:
            email = request.form['email']
            un = request.form['username']
            rn = request.form['rollnumber']
```

```python
        pin = request.form['pin']

        with sql.connect("User_database.db") as con:
            cur = con.cursor()
            cur.execute("INSERT INTO users (email,username,rollnumber,pin) VALUES (?,?,?,?)",(email,un,rn,pin) )
            con.commit()
            msg = "Record successfully added!"
        except:
            con.rollback()
            msg = "error in insert operation"

        finally:
            return render_template("list.html",msg = msg)
            con.close()


@app.route('/list')
def list():
    con = sql.connect("User_database.db")
    con.row_factory = sql.Row

    cur = con.cursor()
    cur.execute("select * from users")

    users = cur.fetchall()
    return render_template("list.html", users = users)


if __name__ == '__main__':
    app.run(debug = True)


@app.route("/delete")
def delete():
    return render_template("delete.html")


@app.route('/deleterecord',methods = ["POST"])
def deleterecord():
    un = request.form['username']
    with sql.connect("User_database.db") as con:
        try:
            cur = con.cursor()
            cur.execute("DELETE FROM users WHERE username = ?",[un])
            con.commit()
            msg = "Record successfully deleted"
        except:
            msg = "can't be deleted"
        finally:
            return render_template("home1.html",msg = msg)


if __name__ == '__main__':
```

```python
    app.run(debug = True)

@app.route('/deldb', methods = ["POST"])
def deldb():
  con = sql.connect('User_database.db')
  cur = con.cursor()
  cur.execute('DELETE FROM users;')
  con.commit()
  con.close()
  msg = 'All the data has been deleted'
  return render_template("home1.html",msg = msg)

@app.route("/log")
def log():
   return render_template("login.html")

@app.route('/login', methods =['GET', 'POST'])
def login():
  un = request.form['username']
  if request.method=='POST':
     users = dbHandler.retrieveUsers()
     msg = 'Logged in successfully!'
     return render_template('welcome.html', users=un, msg=msg)
  else:
     msg = 'You are not registered, would you like to be registered'
     return render_template('home1.html', msg=msg)

if __name__ == '__main__':
  app.run(debug=False, host='0.0.0.0')
```

Models.py

```python
import sqlite3 as sql


def retrieveUsers():
  con = sql.connect("User_database.db")
  cur = con.cursor()
  cur.execute("SELECT username, pin FROM users")
  users = cur.fetchone()
  con.close()
  return users
```

sqlite_db_setup.py

```python
import sqlite3

conn = sqlite3.connect('User_database.db')
print("Opened database successfully")

conn.execute('CREATE TABLE users (email TEXT, username TEXT, rollnumber INTEGER, pin INTEGER)')
print("Table created successfully")
conn.close()
```

Home.html

```html
<h1>Welcome to User DB APP</h1><br><br>

<a href="/">HOME</a><br><br>
<a href="/adduser">User Registration</a><br><br>
<a href="/list">List User</a><br><br>
<a href="/log">Log in</a><br><br>
<a href="/delete">Remove a User</a>
```

Add_user.html

```html
<form action = "{{ url for('addrec') }}" method = "POST">
   <h3>User Information</h3>
   E-mail<br>
   <input type = "email" name = "email" /></br>

   Username<br>
   <input type = "text" name = "username" /></br>

   Rollnumber<br>
   <input type = "text" name = "rollnumber" /><br>

   PIN<br>
   <input type = "password" name = "pin" min="4" max="8" /><br><br>
   <input type = "submit" value = "submit" /><p>        </p>
   <input type = "reset"/>
</form>
```

list.html

```html
<!doctype html>

<html>
  <body>

   <a href="/">HOME</a><br><br>
```

```html
<a href="/adduser">Add New Student</a><br><br>
<a href="/list">List Student</a><br><br>
<br><hr>


{{ msg }}


<table border = 1>
  <thead>
    <td>    Email    </td>
    <td>   Username  </td>
    <td> Roll Number </td>
    <td>     Pin    </td>
  </thead>

  {% for row in users %}
    <tr>
      <td>{{row["email"]}}</td>
      <td>{{row["username"]}}</td>
      <td> {{ row["rollnumber"]}}</td>
      <td>{{row['pin']}}</td>
    </tr>
  {% endfor %}
</table>


</body>
</html>
```
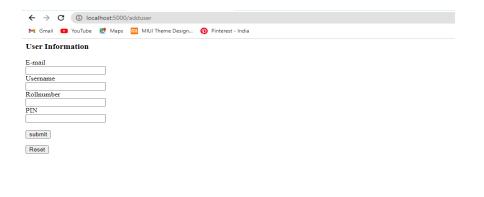

Welcome to User DB APP

HOME

User Registration

List User

Log in

Remove a User

User Information

E-mail

Username

Rollnumber

PIN

submit

Reset

w User

er

	Username	Roll Number	Pin
kumar56684@gmail.com	Tharun	512219205009	1911
ic007@skpec.in	Raja	512219205008	1234
mizhsurya232@gmail.com	Senthamizh	512219104701	2221
nsarali26112001@skpec.in	Ansar	512219104302	4321

HOME

User Registration

List User

Log in

Log In

Username

pin

Log In

HOME

User Registration

List User

Log in

Welcome

User Tharun Logged in successfully!

HOME

Remove User

username [Tharun] [Submit]

[Delete all the data]

HOME

User Registration

List User

Log in

Record successfully deleted

Gmail   ▶ YouTube   🗺 Maps   ⬛ MIUI Theme Design...   📌 Pinterest - India

E

New User

User

il	Username	Roll Number	Pin
ific007@skpec.in	Raja	512219205008	1234
namizhsurya232@gmail.com	Senthamizh	512219104701	2221
dansarali26112001@skpec.in	Ansar	512219104302	4321

Gmail   ▶ YouTube   🗺 Maps   ⬛ MIUI Theme Design...   📌 Pinterest - India

E

New User

User

| Username | Roll Number | Pin |