Assignment -2
Python Programming

Assignment Date	30-10-2022
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Student Roll Number	311019104023

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

```
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']
    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
```

```python
                        (?,?,?,?)",(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__':
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)
```

```python
@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 import

sqlite3 as sql

```python
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

import sqlite3

```python
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

<h1>Welcome to User DB APP</h1>


```html
<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

```
<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

```
<!doctype html>
<html>
 <body>

  <a href="/">HOME</a><br><br>
  <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>
```
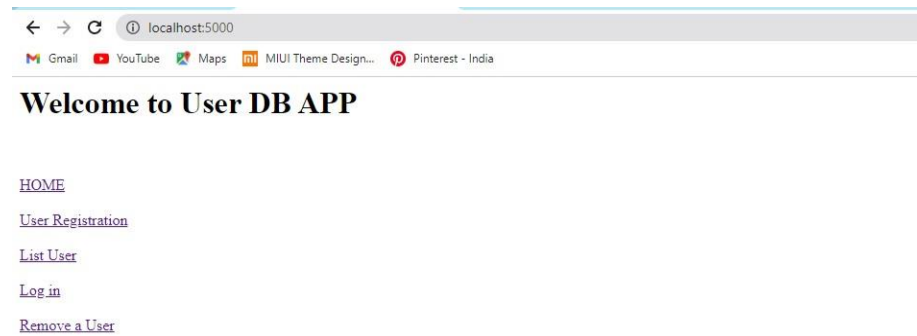
```
    {% endfor %}
  </table>


 </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

Email	UserName	Roll Number	PIN
19cs023@kcgcollege.com	Gracia Betty J	19CS023	1235
19cs017@kcgcollege.com	Deepthi OP	19CS017	6789
19cs026@kcgcollege.com	Harivarthini R	19CS026	1011
19cs006@kcgcollege.com	Aishwarya R	19CS006	1213

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HOME

User Registration

List User

Log in

Log In

Username

pin

Log In

HOME

Remove User

Username [   ] Submit

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HOME

User Registration

List User

Log in

Record successfully deleted

Email	UserName	Roll Number	PIN
19cs023@kcgcollege.com	Gracia Betty J	19CS023	1235
19cs017@kcgcollege.com	Deepthi OP	19CS017	6789
19cs006@kcgcollege.com	Aishwarya R	19CS006	1213