Assignment -2

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 (?,?,?,?)",(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)

@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


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

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><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

```
<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>
```