Assignment -2

Python Programming

Student Name	Priyadharshini M
Student Roll Number	73771914152
Team ID	PNT2022TMID11718

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

```
fromflaskimportFlask,render template,request,redirect
     importsqlite3assqlimport
     modelsasdbHandler
     app =Flask(name
     )app.secre t key
='fasdgfdgdfg'
     @app.route('/')
     def home():
      returnrender_template('home.html')
     @app.route('/adduser')
     def new user():
       returnrender template('add_user.html')
     @app.route('/addrec', methods = ['POST',
     'GET'])def addrec(): if request.method
     == 'POST':try:
          email=request.form['email']un=r
          equest.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="errorininsertoperation"
finally:
         return render template("list.html", msg =
         msg)con.close()
    @app.route('/list')
    def list():
     con =
     sql.connect("User database.db")con.row factory=sq
cur =
     con.cursor()cur.execute("selec
     t *fromusers")
     users=cur.fetchall()
     return render template("list.html", users=users)
         == 'main
ifname
         ____':app.run(debu
     q = True)
    @app.route("/delete")
    def delete():
      returnrender 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() msq
           = "Record successfully
        deleted"except:
          msg = "can't be
        deleted"finally:
          return render template("home1.html", msg =msg)
          == 'main
ifname
           ____':app.run(debu
      q = True)
    @app.route('/deldb', methods = ["POST"])def
     con = sql.connect('User database.db')cur=co
     n.cursor()cur.execute('DELETEFROM
     users; ') con.commit() con.close() msg='Allthe
     data has been deleted' return
     render_template("home1.html", msg =msg)
```

```
@app.route("/log") def
    log():
      returnrender template("login.html")
    @app.route('/login', methods =['GET',
    'POST'])def login(): un =
    request.form['username']ifreq
    uest.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'returnrender template('home1.html',msg=msg)
ifname
          == 'main
           _____':app.run(debug=False,host
      ='0.0.0.0')
```

Models.py

```
import sqlite3 as sql

defretrieveUsers():
    con =
    sql.connect("User_database.db")cur
    =con.cursor()
    cur.execute("SELECT username, pin FROM users")users =cur.fetchone()
    con.close()ret urnusers
```

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,
    rollnumberINTEGER,pinINTEGER)') print("Table created
    successfully")conn.close()
```

Home.html

```
<h1>Welcome to User DB APP</h1><br><
ahref="/">HOME</a><br><br><
ahref="/adduser">UserRegistration</a><br><br><ahref="/list">ListUser</a><br><<ahref="/log">Log in</a><br><ahref="/delete">Remove aUser</a>
```

Add_user.html

```
<form action = "{{ url for('addrec') }}" method = "POST">
      <h3>User
      Information</h3>E-
      mail<br>
      <inputtype="email"name="email"/></br>
      Username<br>
      <inputtype="text"name="username"/></br>
      Rollnumber<br>
      <inputtype="text"name ="rollnumber"/><br>
      PIN<br>
      <inputtype="password"name ="pin" min="4"max="8"</pre>
      /><br><br>
      <inputtype="submit"value ="submit"/>
                                                     <inputtype="reset"/>
     </form>
list.html
    <!doctype html>
    <html>
      <body>
      <ahref="/">HOME</a><br><br>
      <ahref="/adduser">Add NewStudent</a><br><br>
      <ahref="/list">ListStudent</a><br><br
> <br><hr>
      {{ msg}}
        <tableborder =1>
         <thead>
            Email 
           Username
           RollNumber
            Pin 
         </thead>
         {% for row inusers%}
           { row["email"] } } 
            { row["username"] } } 
            { row["rollnumber"] } } 
            { row['pin'] } } 
           {%endfor %}
        </body>
    </html>
```