

Assignment -2

Python Programming

Student Name	Santhosh R
Student Roll Number	73771914165
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

```
from flask import Flask, render_template, request, redirect
import sqlite3 as sql
import model 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']
            username=request.form['username']
            rollnumber=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
l.Row
cur =
    con.cursor()cur.execute("selec
t *fromusers")

    users=cur.fetchall()
    return render_template("list.html", users=users)
ifname == 'main
_____':app.run(debu
g = 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() msg
        = "Record successfully
deleted"except:
        msg = "can't be
deleted"finally:
        return render_template("home1.html",msg =msg)
ifname == 'main
_____':app.run(debu
g = True)

@app.route('/delddb', methods = ["POST"])def
delddb():
    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():
    return render_template("login.html")

@app.route('/login', methods =['GET',
'POST'])def login(): un =
request.form['username']if req
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'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">UserRegistration</a><br><br>
<a href="/list">ListUser</a><br><br>
<a href="/log">Log in</a><br><br>
<a href="/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"
/><br><br>
<inputtype="submit"value = "submit"/><p>                </p>
<inputtype="reset"/>
</form>
```

list.html

```
<!doctype html>

<html>
<body>

<a href="/">HOME</a><br><br>
<a href="/adduser">Add NewStudent</a><br><br>
<a href="/list">ListStudent</a><br><br>
> <br><hr>
    {{ msg }}

    <tableborder =1>
        <thead>
            <td> Email </td>
            <td>Username</td>
            <td>RollNumber</td>
            <td> Pin </td>
        </thead>

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

</body>
</html>
```