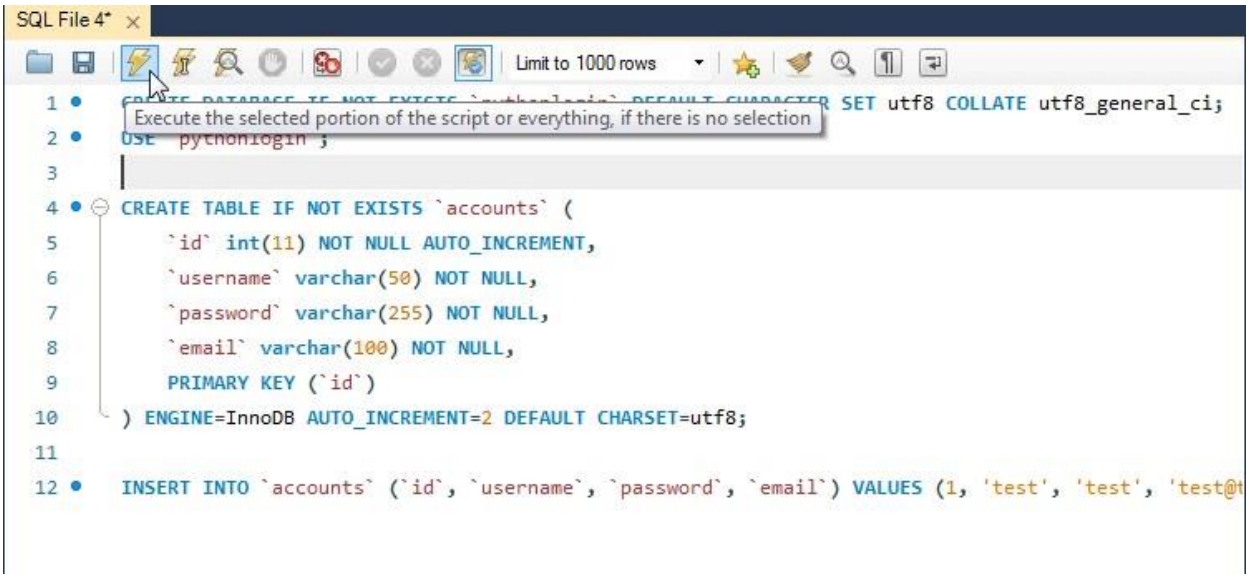
Assignment -2

Cloud Application Development Assignment Date	19 September 2022
Student Name	Ms. Sruthi. B
Student Roll Number	211519104160
Maximum Marks	2 Marks

Question:

1. Create a flask App
2. Add the Home page, About page
3. Add the Bootstrap
4. Add the Sign in page and App the Signup page + database connectivity

Creating the Database and setting-up Tables:



main.py

import the packages

```
from flask import Flask, render_template, request, redirect, url_for, session
from flask_mysqldb import MySQL
import MySQLdb.cursors
import re
```

MySQL connection

```
app = Flask(_name_)
app.secret_key = 'your secret key'
app.config['MYSQL_HOST'] = 'localhost'
app.config['MYSQL_USER'] = 'root'
app.config['MYSQL_PASSWORD'] = ''
app.config['MYSQL_DB'] = 'pythonlogin'
mysql = MySQL(app)
@app.route('/pythonlogin/', methods=['GET', 'POST'])
def login():
    msg = ''
    return render_template('index.html', msg='')
```

Authenticating with users

```
    if request.method == 'POST' and 'username' in request.form and 'password' in request.form:
        username = request.form['username']
        password = request.form['password']
        cursor = mysql.connection.cursor(MySQLdb.cursors.DictCursor)
        cursor.execute('SELECT * FROM accounts WHERE username = %s AND password = %s',
(username, password,))
        account = cursor.fetchone()
        if account:
            session['loggedin'] = True
            session['id'] = account['id']
            session['username'] = account['username']
            return 'Logged in successfully!'
        else:
            msg = 'Incorrect username/password!'
```

Logout script

```
@app.route('/pythonlogin/logout')
def logout():
  session.pop('loggedin', None)
  session.pop('id', None)
  session.pop('username', None)
  return redirect(url_for('login'))
```

Registering user

```
@app.route('/pythonlogin/register', methods=['GET', 'POST'])
def register():
   msg = ''
   if request.method == 'POST' and 'username' in request.form and 'password' in request.form and 'email' in request.form:
      username = request.form['username']
      password = request.form['password']
      email = request.form['email']
      cursor = mysql.connection.cursor(MySQLdb.cursors.DictCursor)
      cursor.execute('SELECT * FROM accounts WHERE username = %s', (username,))
      account = cursor.fetchone()
      if account:
         msg = 'Account already exists!'
      elif not re.match(r'[^@]+@[^@]+\.[^@]+', email):
         msg = 'Invalid email address!'
      elif not re.match(r'[A-Za-z0-9]+', username):
      msg = 'Username must contain only characters and numbers!'
      elif not username or not password or not email:
         msg = 'Please fill out the form!'
```

```
        else:
            cursor.execute('INSERT INTO accounts VALUES (NULL, %s, %s, %s)', (username, password, email,))
            mysql.connection.commit()
            msg = 'You have successfully registered!'
    elif request.method == 'POST':
        msg = 'Please fill out the form!'
    return render_template('register.html', msg=msg)
```

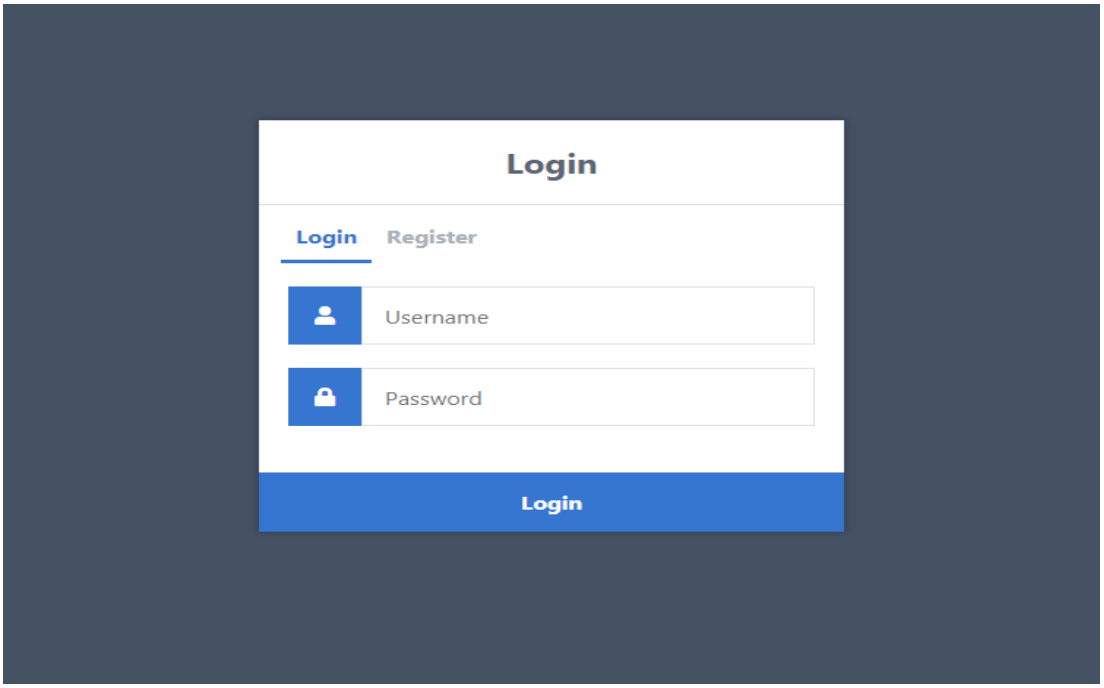
Creating Home Page

```
@app.route('/pythonlogin/home')
def home():
    if 'loggedin' in session:
        return render_template('home.html', username=session['username'])
    return redirect(url_for('login'))
```

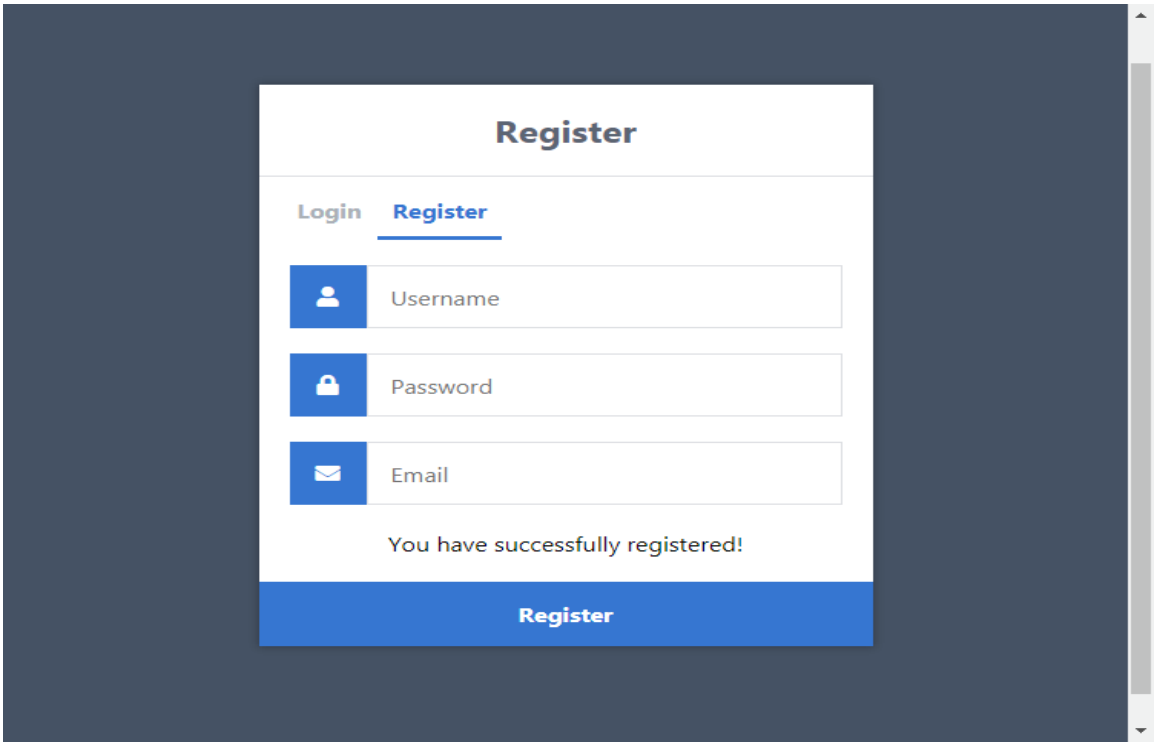
Creating profile page

```
@app.route('/pythonlogin/profile')
def profile():
    if 'loggedin' in session:
        cursor = mysql.connection.cursor(MySQLdb.cursors.DictCursor)
        cursor.execute('SELECT * FROM accounts WHERE id = %s', (session['id'],))
        account = cursor.fetchone()
        return render_template('profile.html', account=account)
    return redirect(url_for('login'))
```

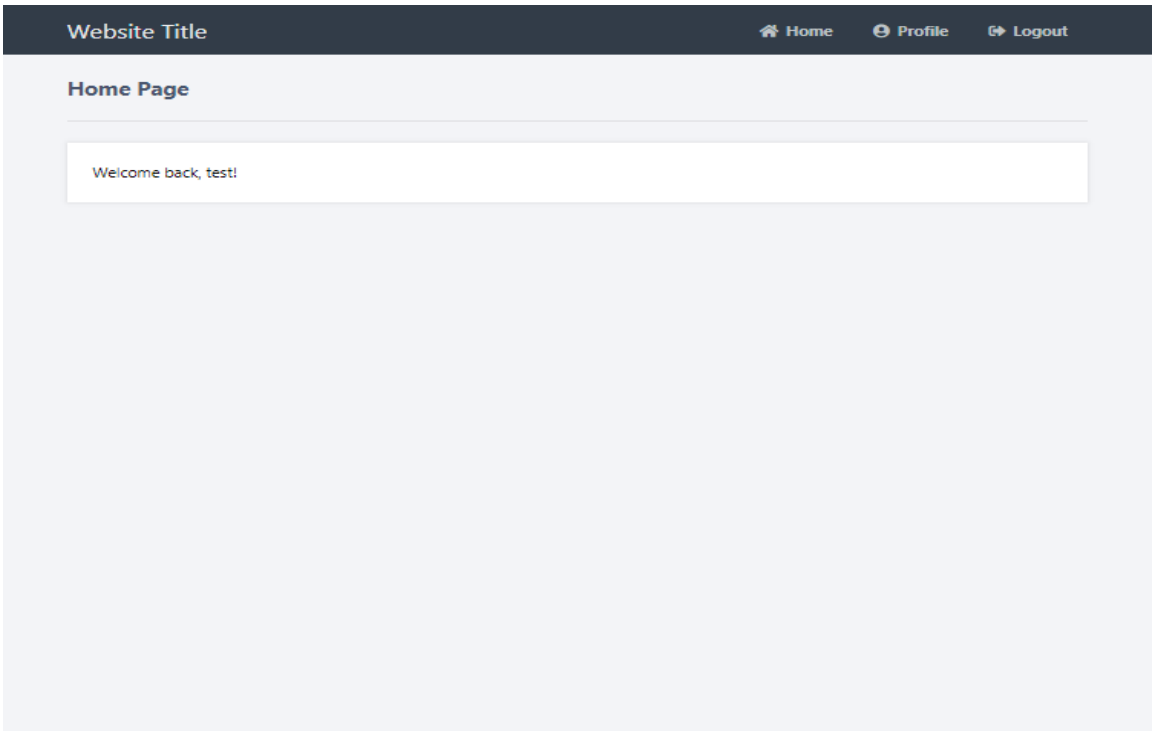
Login Page:



Register page:



Home Page:



Profile Page: