

Assignment -1

Assignment Date	27 September 2022
Student Name	Mr. Jetson Cyrus J
Student Roll Number	9517201904060
Maximum Marks	2 Marks

Question-1:

Create registration page in html with username, email and phone number and by using POST method display it in next html page.

Solution:

App.py:

```
from flask import Flask, render_template, redirect, request

app = Flask(__name__)

@app.route('/login', methods=['GET', 'POST'])
def login():
    if request.method == 'POST':
        print("in post of login")
        username = request.form.get('username')
        email = request.form.get('email')
        print(email)
        phn= request.form['phn']
        print(phn)
        return render_template('afterlogin.html', username = username, email= email, phn = phn)
    else:
        print("in else of login")
        return render_template('login.html')

if __name__ == '__main__':
    app.run(debug=True)
```

base.html:

```
<html>

<head>

    <link rel="stylesheet" href="static/css/main.css"/>

    {% block head %}

    {% endblock %}

</head>

<body>

    {% block body %}

    {% endblock %}

</body>
</html>
```

main.css:

```
body{

    font-family: Helvetica;

    /* background-color: white; */

    background: black;

    /* background-image: url('///img1.jpg'); */

    /* background-image: url(img1.jpg); */

}

.title{

    border-radius: 1rem;

    background: gray;

    padding: 5px;

}
```

```
.login{  
  border-radius: 2rem;  
  background: gray;  
  padding: 10px;  
  width: 70%;  
}
```

```
.textbox{  
  background-color: gray;  
  border-radius: 1rem;  
}
```

```
.sub{  
  background-color: grey;  
  color: black;  
  border-radius: 1rem;  
  padding: 10px;  
  cursor: pointer;  
}
```

```
.sub:hover{  
  background-color: black;  
  color: white;  
}
```

```
button:hover{  
  background-color: black;  
  color: white;  
}
```

```
.formpad{
    padding: 10px;
}
```

login.html:

```
{% extends 'base.html' %}
```

```
{% block head %}
<title>Login</title>
{% endblock %}
```

```
{% block body %}
```

```
<div class="title">
    <center>
        <h1>
            Registration Page
        </h1>
    </center>
</div>
```

```
<br>
```

```
<br>
```

```
<center>
```

```
<div class="login">
```

```
<center>
```

```
<form action="/login" class="formpad" method="POST">
```

```
<b> Register Now!</b><br><br>
```

```
Username: <input type="text" class="txtbox" name="username" id="username">
```

```
<br><br>
E-mail: <input type="text" class="textbox" name="email" id="email">
<br><br>
Phone Number: <input type="text" class="textbox" name="phn" id="phn">
<br><br>
<input type="submit" class="sub" value="Register">
<!-- <button type="submit" class="sub">Register</button> -->
</form>
</center>
</div>
</center>
```

```
{% endblock %}
```

afterlogin.html:

```
{% extends 'base.html' %}
```

```
{% block head %}
```

```
<title>Login</title>
```

```
{% endblock %}
```

```
{% block body %}
```

```
<div class="title">
```

```
<center>
```

```
<br>
```

```
<h1>
```

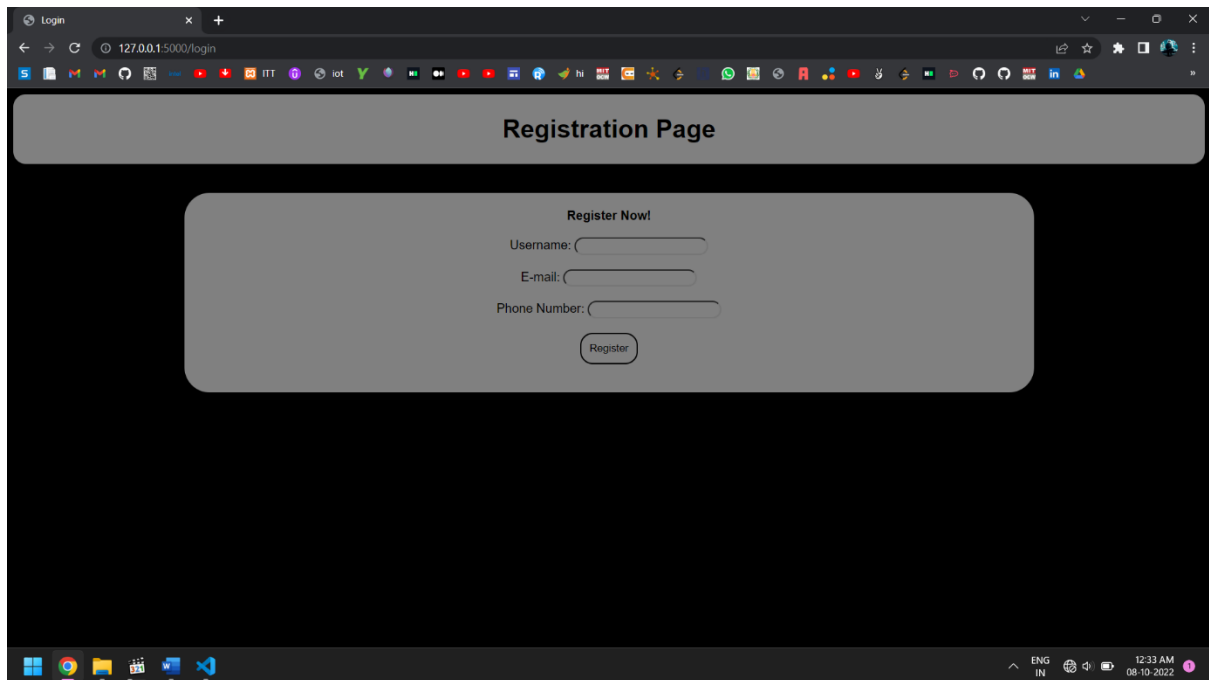
```
    You successfully registered!!
```

```
        </h1>
    </center>
</div>
<br>
<hr>
<br>
<center>
    <div class="login">
        <center>
            <h3>
                Username: {{ username }}
                <br><br>
                E-mail: {{ email}}
                <br><br>
                Phone Number: {{ phn }}
                <br><br>
            </h3>
        </center>
    </div>
</center>
```

```
{% endblock %}
```

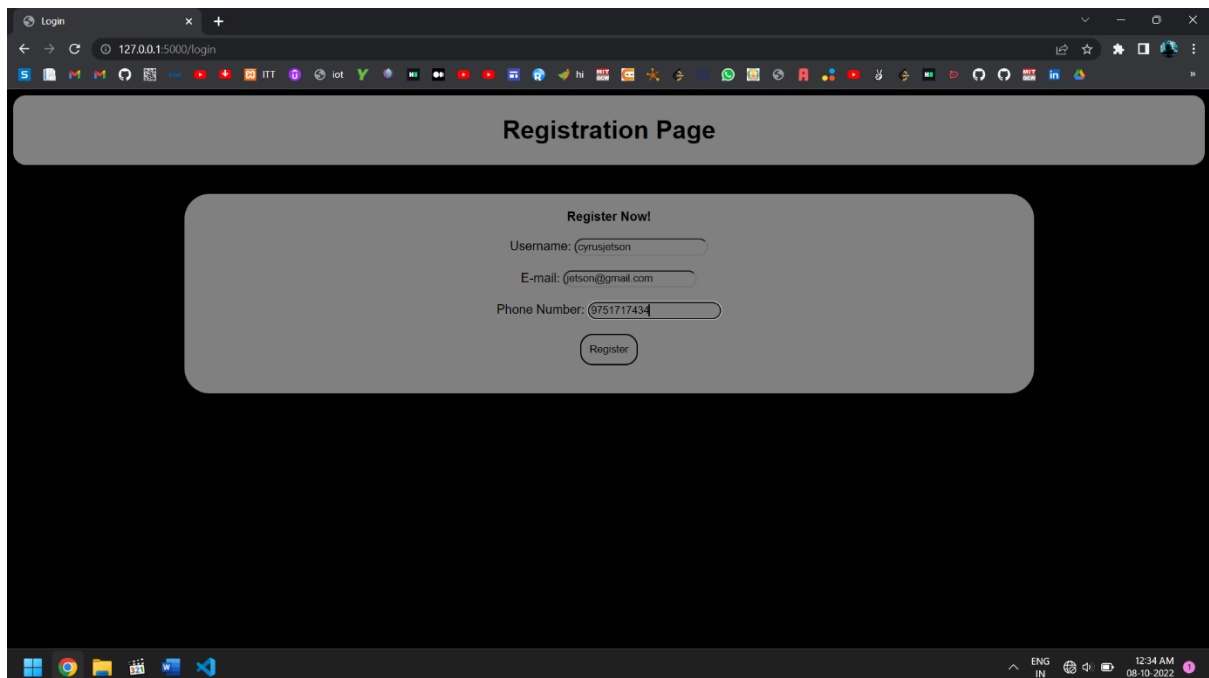
Output:

Before:



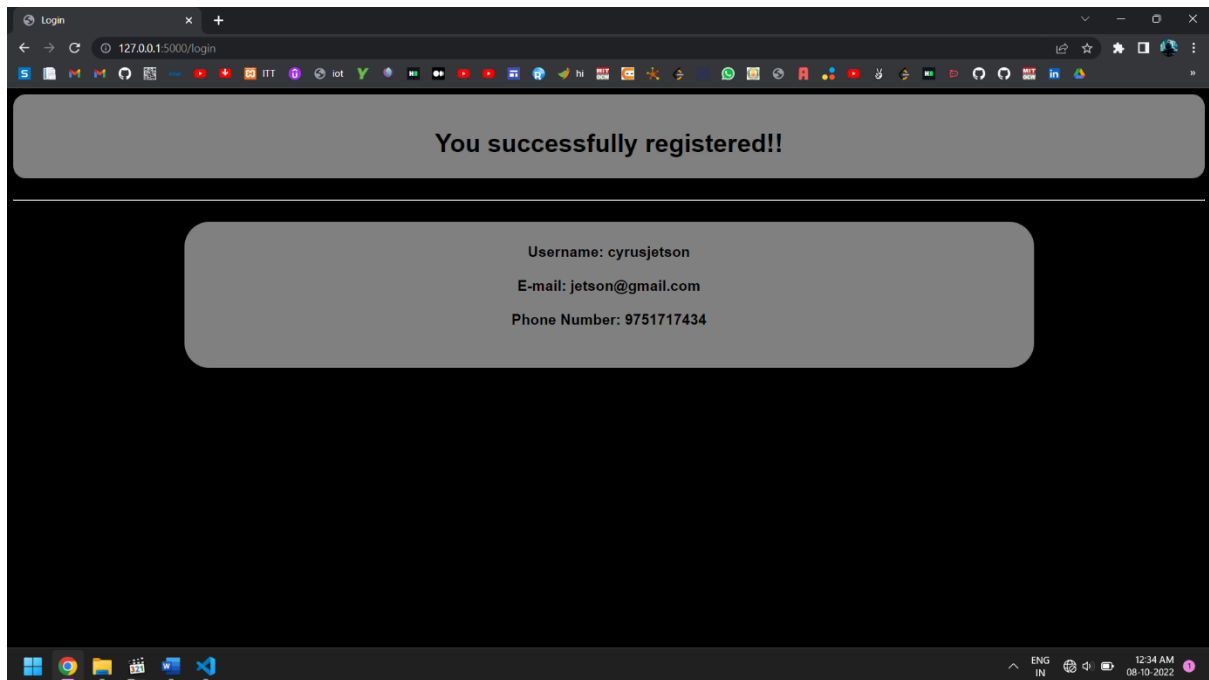
The screenshot shows a web browser window with the title "Login" and the address bar displaying "127.0.0.1:5000/login". The page has a dark background with a light gray header bar containing the text "Registration Page". Below the header, there is a light gray rounded rectangle containing the text "Register Now!". Underneath, there are three input fields labeled "Username:", "E-mail:", and "Phone Number:". Each field is empty. Below the input fields is a button labeled "Register". The browser's taskbar at the bottom shows various application icons and the system clock indicating 12:33 AM on 08-10-2022.

Entering Details:



The screenshot shows the same web browser window as before, but now the input fields are filled with text. The "Username:" field contains "cyrujetson", the "E-mail:" field contains "jetson@gmail.com", and the "Phone Number:" field contains "0751717434". The "Register" button remains visible below the input fields. The browser's taskbar at the bottom shows the same application icons and the system clock indicating 12:34 AM on 08-10-2022.

After register:



Question-2:

Develop a flask program which should contain at least 5 packages used from pypi.org.

Solution:

```
import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
import pendulum
from flask import Flask
import io
from flask import Response
from matplotlib.backends.backend_agg import FigureCanvasAgg as FigureCanvas
from matplotlib.figure import Figure
import seaborn as sns

app = Flask(__name__)
@app.route('/')
def check():
    x = 5
    y=6
    z=np.add(x,y)
    return ' %d' %z
```



```

@app.route('/plot')
def plot_png():
    plt.rcParams["figure.figsize"] = [7.50, 3.50]
    plt.rcParams["figure.autolayout"] = True
    fig = Figure()
    axis = fig.add_subplot(1, 1, 1)
    xs = np.random.rand(100)
    ys = np.random.rand(100)
    axis.plot(xs, ys)
    output = io.BytesIO()
    FigureCanvas(fig).print_png(output)
    return Response(output.getvalue(), mimetype='image/png')

@app.route('/pandas')
def pandas():
    ser=pd.Series([0.25,0.7,0.5])
    return ' %f' %ser[0]

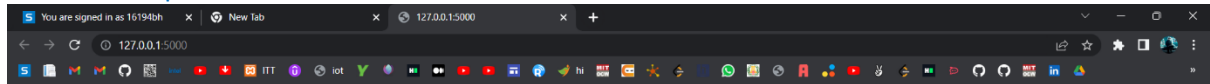
@app.route('/seaborn')
def seaborn():
    fig=Figure()
    x=[i for i in range(100)]
    y=[i for i in range(100)]
    sns.set()
    fig,ax=plt.subplots(1,1)
    sns.lineplot(x,y)
    img = io.BytesIO()
    FigureCanvas(fig).print_png(img)
    return Response(img.getvalue(),mimetype='img/png')

@app.route('/pendulum')
def pendulum1():
    local = pendulum.local(2020, 11,27)
    zone=local.timezone.name
    return '%s' %zone

if __name__ == '__main__':
    app.run()

```

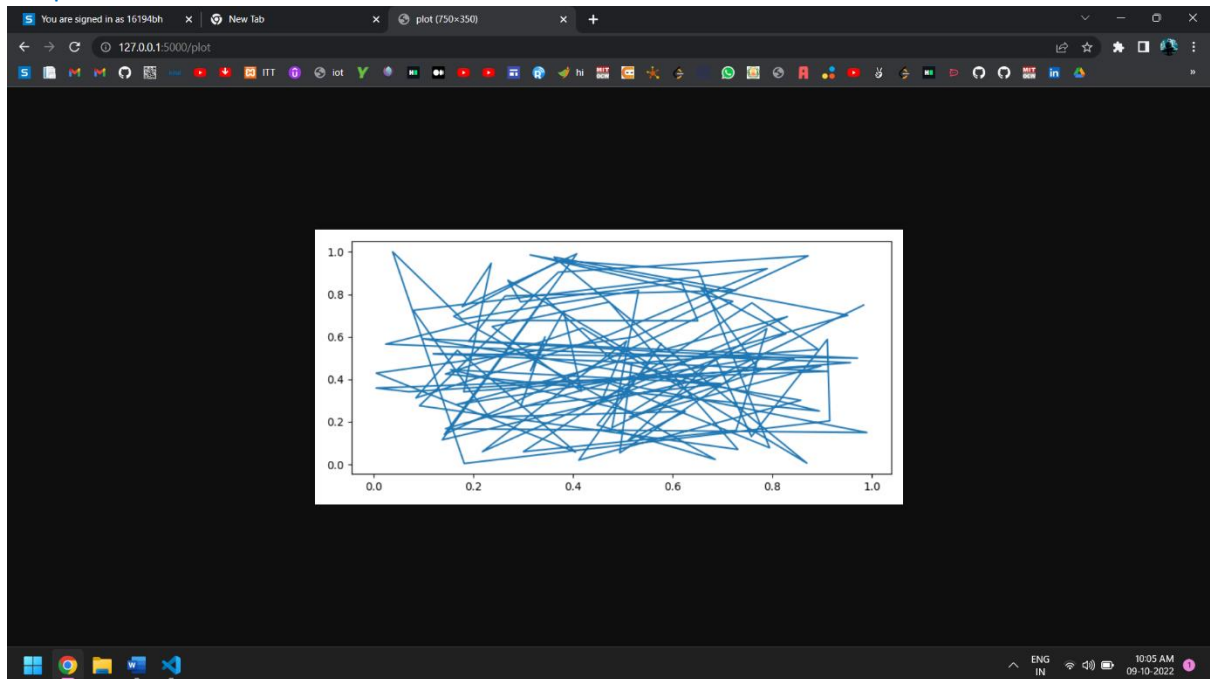
For np:



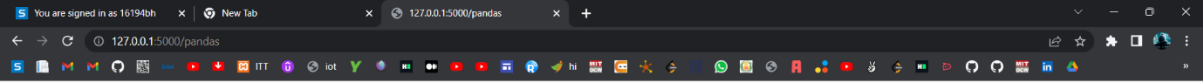
11



For plot:



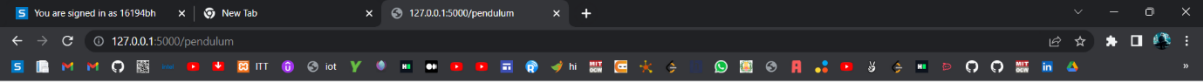
For Pandas:



0.250000



For Pendulum:



Asia/Calcutta

