Web Programming Lab

Q. Create a website with two pages. Page 1 has two TextBoxes (name and total marks) and one 'Calculate' Button as shown in the figure. On clicking the 'Calculate' Button, CGPA (total marks/50) along with the name should be displayed in the Page 2. Use Django sessions to store the information.

Index.html

```
<!DOCTYPE html>

<html>

<head>

 <meta charset="UTF-8">

 <title>Page 1</title>

 <style>

  html, body {

    margin: 0;

    padding: 0;

    height: 100%;

    display: flex;

    justify-content: center;

    align-items: center;

    background-color: #f5f5f5;

  }

  .box {

    border: 2px solid #ccc;

    border-radius: 6px;

    background-color: #fff;

    padding: 20px;

    box-shadow: 0 0 10px rgba(0,0,0,0.1);

  }

  .form-group {
```

```css
      margin-bottom: 15px;

    }
    label {

      display: block;

      margin-bottom: 5px;

      font-weight: bold;

    }
    input[type="text"] {

      width: 200px;

      padding: 6px;

      border: 1px solid #ccc;

      border-radius: 4px;

    }
    input[type="submit"] {

      padding: 6px 12px;

      border: none;

      border-radius: 4px;

      background-color: #000000;

      color: #fff;

      cursor: pointer;

    }
    input[type="submit"]:hover {

      background-color: #000000;

    }
  </style>
</head>
<body>
  <div class="box">
    <form method="post">

      {% csrf_token %}

      <div class="form-group">
```

```html
      <label for="name">Name:</label>

      <input type="text" name="name" id="name">

    </div>

    <div class="form-group">

      <label for="marks">Total Marks:</label>

      <input type="text" name="marks" id="marks">

    </div>

    <div>

      <input type="submit" value="Calculate">

    </div>

  </form>

 </div>

</body>

</html>
```

Views.py

```python
from django.shortcuts import render, redirect

def page1(request):

    if request.method == 'POST':

        name = request.POST.get('name', '')

        marks = request.POST.get('marks', '0')

        request.session['name'] = name

        request.session['marks'] = marks

        return redirect('page2')

    return render(request, 'cgpaapp/page1.html')



def page2(request):

    name = request.session.get('name', 'NoName')
```

```python
        marks = request.session.get('marks', '0')

    try:

        marks_val = float(marks)

    except ValueError:

        marks_val = 0

    cgpa = marks_val / 50

    return render(request, 'cgpaapp/page2.html', {'name': name, 'cgpa': cgpa})
```

Settings.py

```python
import os from pathlib import Path

BASE_DIR = Path(file).resolve().parent.parent SECRET_KEY = 'replace-this-with-a-secure-key' DEBUG = True
ALLOWED_HOSTS = []

INSTALLED_APPS = [ 'django.contrib.admin', 'django.contrib.auth', 'django.contrib.contenttypes',
'django.contrib.sessions', 'django.contrib.messages', 'django.contrib.staticfiles', 'cgpaapp', ]

MIDDLEWARE = [ 'django.middleware.security.SecurityMiddleware',
'django.contrib.sessions.middleware.SessionMiddleware', 'django.middleware.common.CommonMiddleware',
'django.middleware.csrf.CsrfViewMiddleware', 'django.contrib.auth.middleware.AuthenticationMiddleware',
'django.contrib.messages.middleware.MessageMiddleware',
'django.middleware.clickjacking.XFrameOptionsMiddleware', ]

ROOT_URLCONF = 'SessionCGPA.urls'

TEMPLATES = [ { 'BACKEND': 'django.template.backends.django.DjangoTemplates', 'DIRS': [], 'APP_DIRS': True,
'OPTIONS': { 'context_processors': [ 'django.template.context_processors.debug',
'django.template.context_processors.request', 'django.contrib.auth.context_processors.auth',
'django.contrib.messages.context_processors.messages', ], }, }, ]

WSGI_APPLICATION = 'SessionCGPA.wsgi.application'

DATABASES = { 'default': { 'ENGINE': 'django.db.backends.sqlite3', 'NAME': BASE_DIR / 'db.sqlite3', } }

AUTH_PASSWORD_VALIDATORS = [ {'NAME':
'django.contrib.auth.password_validation.UserAttributeSimilarityValidator'}, {'NAME':
'django.contrib.auth.password_validation.MinimumLengthValidator'}, {'NAME':
'django.contrib.auth.password_validation.CommonPasswordValidator'}, {'NAME':
'django.contrib.auth.password_validation.NumericPasswordValidator'}, ]

LANGUAGE_CODE = 'en-us' TIME_ZONE = 'UTC' USE_I18N = True USE_TZ = True STATIC_URL = '/static/'
```

```python
from django.contrib import admin

from django.urls import include, path

urlpatterns = [

    path('admin/', admin.site.urls),

    path('', include('cgpaapp.urls')),

]
```
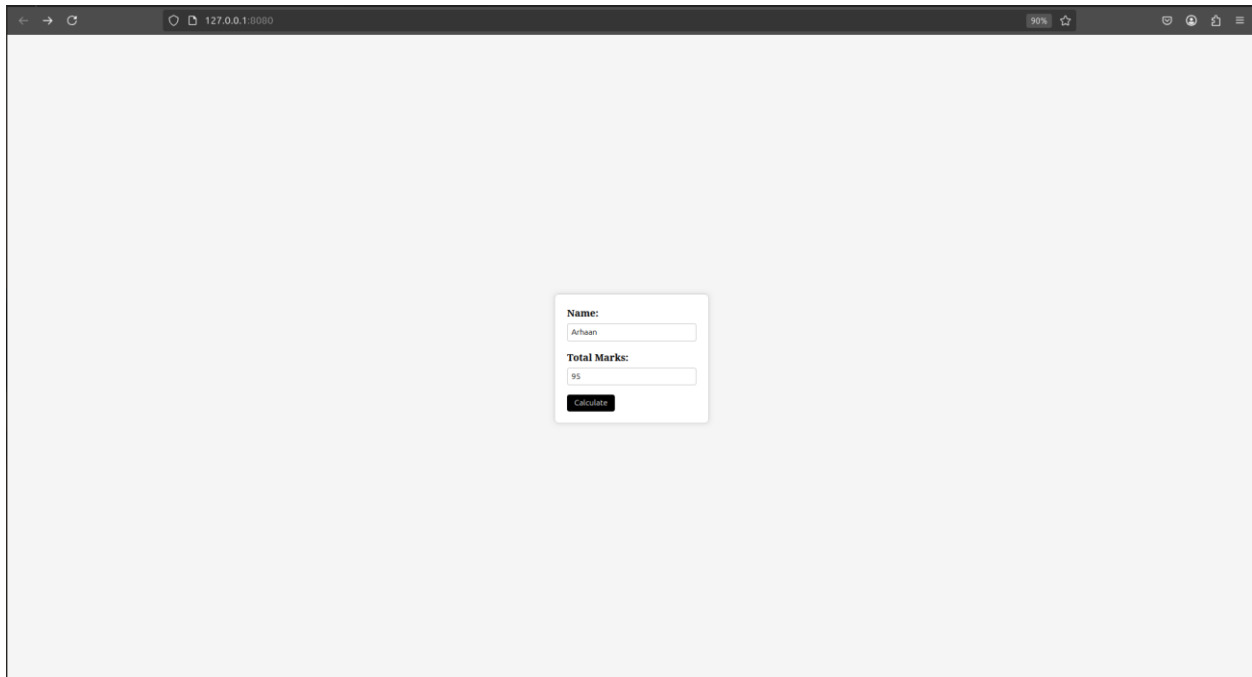
OUTPUT

Welcome Arhaan

Your CGPA is = 1.9