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### **Question1:**

**Create a web form which allows the teacher to enter the student details like name, date of birth, address, contact number, email id and marks of English, Physics and Chemistry. After filling all the information and on clicking submit button, details should be added to a textarea displayed on the same page. Display the total percentage of marks obtained in a label.**

### **Project App Files**

#### **asgi.py**

```
import os  
  
from django.core.asgi import get_asgi_application  
  
os.environ.setdefault('DJANGO_SETTINGS_MODULE', 'Question1.settings')  
  
application = get_asgi_application()
```

#### **settings.py**

```
"""
```

Django settings for Question1 project.

Generated by 'django-admin startproject' using Django 3.2.

For more information on this file, see  
<https://docs.djangoproject.com/en/3.2/topics/settings/>

For the full list of settings and their values, see  
<https://docs.djangoproject.com/en/3.2/ref/settings/>  
"""

```
from pathlib import Path  
import os
```

```
# Build paths inside the project like this: BASE_DIR / 'subdir'.  
BASE_DIR = Path(__file__).resolve().parent.parent
```

```
templates_path=os.path.join(BASE_DIR,'templates')
```

```
# Quick-start development settings - unsuitable for production  
# See https://docs.djangoproject.com/en/3.2/howto/deployment/checklist/
```

```

# SECURITY WARNING: keep the secret key used in production secret!
SECRET_KEY = 'django-insecure-2dbiv@u#k#_s6o%drul3umlkfro5v!*4ps3-mzfv=)30%3v8aj'

# SECURITY WARNING: don't run with debug turned on in production!
DEBUG = True

ALLOWED_HOSTS = []

# Application definition

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

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 = 'Question1.urls'

TEMPLATES = [
    {
        'BACKEND': 'django.template.backends.django.DjangoTemplates',
        'DIRS': [templates_path],
        '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 = 'Question1.wsgi.application'

```

```
# Database
# https://docs.djangoproject.com/en/3.2/ref/settings/#databases
```

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

```
# Password validation
# https://docs.djangoproject.com/en/3.2/ref/settings/#auth-password-validators
```

```
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',
    },
]
```

```
# Internationalization
# https://docs.djangoproject.com/en/3.2/topics/i18n/
```

```
LANGUAGE_CODE = 'en-us'
```

```
TIME_ZONE = 'UTC'
```

```
USE_I18N = True
```

```
USE_L10N = True
```

```
USE_TZ = True
```

```
# Static files (CSS, JavaScript, Images)
# https://docs.djangoproject.com/en/3.2/howto/static-files/
```

```
STATIC_URL = '/static/'
```

```
# Default primary key field type
```

```
# https://docs.djangoproject.com/en/3.2/ref/settings/#default-auto-field
```

```
DEFAULT_AUTO_FIELD = 'django.db.models.BigAutoField'
```

### **urls.py**

```
from django.contrib import admin
from django.urls import path, include
import Question
```

```
urlpatterns = [
    path('admin/', admin.site.urls),
    path("", include('Question.urls')),
]
```

### **wsgi.py**

```
import os

from django.core.wsgi import get_wsgi_application

os.environ.setdefault('DJANGO_SETTINGS_MODULE', 'Question1.settings')

application = get_wsgi_application()
```

## **User App Files**

### **apps.py**

```
from django.apps import AppConfig

class QuestionConfig(AppConfig):
    default_auto_field = 'django.db.models.BigAutoField'
    name = 'Question'
```

### **urls.py**

```
from django.contrib import admin
from django.urls import path

from Question import views

urlpatterns = [
    path('admin/', admin.site.urls),
    path("", views.index),
]
```

## **views.py**

```
from django.shortcuts import render

# Create your views here.

from django.http import HttpResponse

def index(request):
    return render(request, 'index.html', context=None)
```

## **Templates**

### **index.html**

```
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js"></script>
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <link rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.4.1/css/bootstrap.min.css"
integrity="sha384-Vkoo8x4CGsO3+Hhxv8T/Q5PaXtkKtu6ug5TOeNV6gBiFeWPGFN9MuhOf23
Q9Ifjh" crossorigin="anonymous">
    <title>Index Page</title>
    <script>
        // function myfunc() {
        //     const mydata = "{{data|safe}}";
        //     alert(mydata)
        //     document.getElementById('exampleFormControlTextarea1').innerHTML("Data")
        // }

        // alert("Sahil")

        $(document).ready(function () {
            $("button").click(function () {
                var eng = parseInt($("#english").val());
                var phy = parseInt($("#physics").val());
                var che = parseInt($("#chemistry").val());

                var per= ((eng+phy+che)/300)*100;
```

```
$("#label1").html("Percentage "+per+"%");
```

```
var name = $("#name").val()  
var dob = $("#dob").val()  
var address = $("#address").val()  
var contact = $("#contact").val()  
var email = $("#email").val()
```

```
var stringRes="Name :"+name+"\n"+"Date of birth: "+dob+"\n"  
+"address: "+address+"\n"+  
"contact: "+contact+"\n"+  
"email: "+email;
```

```
var email = $("#exampleFormControlTextarea1").val(stringRes)
```

```
return false; // prevents submission  
// $("#textarea#ExampleMessage").html(result.exampleMessage)
```

```
});  
});  
</script>
```

```
</head>
```

```
<body class="bg-dark">
```

```
<div class="container" style="text-align: center;">  
<h1 class="text-light">Form</h1>  
</div>
```

```
<div class="container text-light ">
```

```
<form method="POST">
```

```
{%csrf_token%}
```

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

```
<label for="inputAddress">Name</label>
```

```
<input type="text" class="form-control" value="" id="name" name='name'  
placeholder="Sahil">  
</div>
```

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

```
<label for="inputAddress">Date of birth</label>
```

```
<input type="date" class="form-control" id="dob" name='dob' placeholder="1234 Main  
St">  
</div>
```

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

```
<label for="inputAddress">Address</label>
```

```
<input type="text" class="form-control" id="address" name="address"  
placeholder="1234 Main St">  
</div>
```

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

```
<label for="inputAddress">Contact</label>
```

```
        <input type="number" class="form-control" id="contact" name="contact"
placeholder="+91xxxxxxxx">
    </div>
```

```
    <div class="form-row">
        <div class="form-group col-md-6">
            <label for="inputEmail4">Email</label>
            <input type="email" class="form-control" id="email" name="email"
placeholder="Email">
        </div>
    </div>
```

```
    <div class="form-row">
        <div class="form-group col-md-6">
            <label for="inputEmail4">English</label>
            <input type="text" class="form-control" id="english" name="english"
placeholder="99">
        </div>
        <div class="form-group col-md-6">
            <label for="inputEmail4">Physics</label>
            <input type="text" class="form-control" id="physics" name="physics"
placeholder="99">
        </div>
        <div class="form-group col-md-6">
            <label for="inputEmail4">Chemistry</label>
            <input type="text" class="form-control" id="chemistry" name="chemistry"
placeholder="99">
        </div>
    </div>
```

```
    <button type="submit" class="btn btn-primary" id="temp"> Get Percentage</button>
    <div style="height: 30px;"></div>
    <div class="form-group">
        <label for="exampleFormControlTextarea1" id="label1" value="label2"> </label>
        <textarea class="form-control" id="exampleFormControlTextarea1"
rows="3"></textarea>
    </div>
</form>
```

```
</div>
```

```
</body>
```

```
</html>
```

## Output

A screenshot of a web browser window displaying a form titled "Form". The browser's address bar shows "127.0.0.1:8000". The form contains the following fields:

- Name: Sahil
- Date of birth: dd/mm/yyyy
- Address: 1234 Main St.
- Contact: +91xxxxxxxx
- Email: Email
- English: 99
- Physics: 99
- Chemistry: 99

Below the input fields is a purple button labeled "Get Percentage". At the bottom of the form is a large, empty white rectangular box.

A screenshot of the same web browser window showing the form after the "Get Percentage" button has been clicked. The form fields are now populated with specific data:

- Name: Sahil Saini
- Date of birth: 14/05/2021
- Address: Manipal Institute of Technology, Manipal
- Contact: 9682661526
- Email: sahilsainisalaria@gmail.com
- English: 89
- Physics: 90
- Chemistry: 98

Below the input fields, the "Get Percentage" button is still visible. Below it, the calculated percentage is displayed: "Percentage 92.33333333333333%". At the bottom, a scrollable box contains a summary of the user's information:

```
Name :Sahil Saini
Date of birth: 2021-05-14
address: Manipal Institute of Technology, Manipal
contact: 9682661526
email: sahilsainisalaria@gmail.com
```



## **Question2**

**Create a web form with employee ids in dropdown list. Use a textbox for accepting date of joining. Add a button named “Am I Eligible for Promotion”. On clicking the button, if he has more than 5 years of experience, then display “YES” else “NO” in the label control.**

## **Project App Files**

same as of above question files

## **User App Files**

### **app.py**

```
from django.apps import AppConfig
```

```
class QuestionConfig(AppConfig):
    default_auto_field = 'django.db.models.BigAutoField'
    name = 'Question'
```

### **urls.py**

```
from django.contrib import admin
from django.urls import path
```

```
from Question import views
```

```
urlpatterns = [
    path('admin/', admin.site.urls),
    path("", views.index),
]
```

### **views.py**

```
from django.shortcuts import render
```

```
# Create your views here.
```

```
from django.http import HttpResponse
```

```
def index(request):

    array = [ "emp" + str(i) for i in range(15)]
    context={'mylist': array}
    return render(request,'index.html',context=context)
```

## Templates

### index.html

```
<!DOCTYPE html>
<html lang="en">

<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible" content="IE=edge">
  <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js"></script>
  <meta name="viewport" content="width=device-width, initial-scale=1.0">
  <link rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.4.1/css/bootstrap.min.css"
integrity="sha384-Vkoo8x4CGsO3+Hhvxv8T/Q5PaXtkKtu6ug5TOeNV6gBiFeWPGFN9MuhOf23
Q9Ifjh" crossorigin="anonymous">
  <title>Index Page</title>
  <script>

    function calculate_yr(dob) {
      var diff_ms = Date.now() - dob.getTime();
      var age_dt = new Date(diff_ms);

      // alert(Math.abs(age_dt.getUTCFullYear() - 1970))
      return Math.abs(age_dt.getUTCFullYear() - 1970);
    }

    $(document).ready(function () {
      $("button").click(function () {
        var dateOfJoin = $("#dateOfJoin").val();
        var d = new Date(dateOfJoin);

        if (calculate_yr(d) > 5) {
          $("#cont").val("Yes!");
        }
        else{
          $("#cont").val("No!");
        }

        return false; // prevents submission
        // $("textarea#ExampleMessage").html(result.exampleMessage)

      });
    });
  </script>

</head>

<body class="bg-dark">
```

```
<div class="container" style="text-align: center;">
  <h1 class="text-light">Form</h1>
</div>
<div class="container text-light ">
  <label for="Employee Ids">Choose your Id:</label>
  <select id="cars" name="cars">
    {% for i in mylist %}
      <option style="background-color: wheat;">{{ i }}</option>
    {% endfor %}
  </select>

</div>
```

```
<div style="height:30px"></div>
<div class="container text-light ">
  <label for="Date of joining">Date of joining</label>
  <input type="text" name="gender" id="dateOfJoin" placeholder="2015-03-25"><br>

</div>
```

```
<div style="height:30px"></div>

<div class="container text-light ">
  <button type="submit" class="btn btn-primary">Am I Eligible for Promotion</button>

</div>
<div style="height:30px"></div>
```

```
<div class="container text-light ">
  <label for="exampleInputEmail1" class='control-label' id="cont_label"></label>
  <input type="text" name="cont_name" id="cont">
</div>
```

```
</body>
```

```
</html>
```

Index Page x +  
127.0.0.1:8000

## Form

Choose your Id: emp0 ▼

Date of joining 2020-03-03

Am I Eligible for Promotion

Query Answer No!

Index Page x +  
127.0.0.1:8000

## Form

Choose your Id: emp0 ▼

Date of joining 2020-03-03

Am I Eligible for Promotion

Query Answer Yes!

### Question3

**Develop a simple web page to perform basic arithmetic operations. Take two integer inputs from the user, select the operation to be performed using a dropdown. Include a button “Calculate” to perform the selected operation, and then display the result in the same web page.**

### Project App Files

same as of above question files

#### **apps.py**

```
from django.apps import AppConfig
```

```
class QuestionConfig(AppConfig):
```

```
default_auto_field = 'django.db.models.BigAutoField'
name = 'Question'
```

## **urls.py**

```
from django.contrib import admin
from django.urls import path
```

```
from Question import views
```

```
urlpatterns = [
    path('admin/', admin.site.urls),
    path("", views.index),
]
```

## **views.py**

```
from django.shortcuts import render
```

```
# Create your views here.
```

```
from django.http import HttpResponse
```

```
def index(request):

    arithmetic_operators = ["+", "-", "*", "/", "**"]
    context = {'mylist': arithmetic_operators}
    return render(request, 'index.html', context=context)
```

## **Templates**

### **index.html**

```
<!DOCTYPE html>
<html lang="en">

<head>
    <meta charset="UTF-8">
    <meta http-equiv="X-UA-Compatible" content="IE=edge">
    <script src="https://ajax.googleapis.com/ajax/libs/jquery/3.5.1/jquery.min.js"></script>
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <link rel="stylesheet"
href="https://stackpath.bootstrapcdn.com/bootstrap/4.4.1/css/bootstrap.min.css"
```

integrity="sha384-Vkoo8x4CGsO3+Hh xv8T/Q5PaXtkKtu6ug5TOeNV6gBiFeWPGFN9MuhOf23Q9Ifjh" crossorigin="anonymous">

<title>Index Page</title>

<script>

```
$(document).ready(function () {
    $("button").click(function () {

        var num1 = $("#num1").val()
        var num2 = $("#num2").val()

        var Operator = $("#op").val()
        var res = eval(num1 + Operator + num2)

        // alert(Operator)
        // alert(res)

        $("#cont").val(res)

        return false; // prevents submission
        // $("#textare#ExampleMessage").html(result.exampleMessage)

    });
});
</script>
```

</head>

```
<body class="bg-dark">
    <div class="container" style="text-align: center;">
        <h1 class="text-light">Form</h1>
    </div>

    <div class="container text-light ">
        <label class='control-label'>Enter First Number </label>
        <input type="text" name="cont_name" id="num1">
    </div>
    <div style="height:30px"></div>

    <div class="container text-light ">
        <label class='control-label'>Enter Second Number</label>
        <input type="text" name="cont_name" id="num2">
    </div>

    <div style="height:30px"></div>

    <div class="container text-light ">
        <label for="Employee Ids">Operator:</label>
        <select id="op" name="cars">
```

```

        {% for i in mylist %}
        <option style="background-color: wheat;">{{i}}</option>
        {% endfor %}
    </select>

</div>

```

```

<div style="height:30px"></div>

```

```

<div class="container text-light ">
    <button type="submit" class="btn btn-primary">Calculate</button>
</div>
<div style="height:30px"></div>

```

```

<div class="container text-light ">
    <label for="exampleInputEmail1" class='control-label' id="cont_label">Result</label>
    <input type="text" name="cont_name" id="cont">
</div>

```

```

</body>

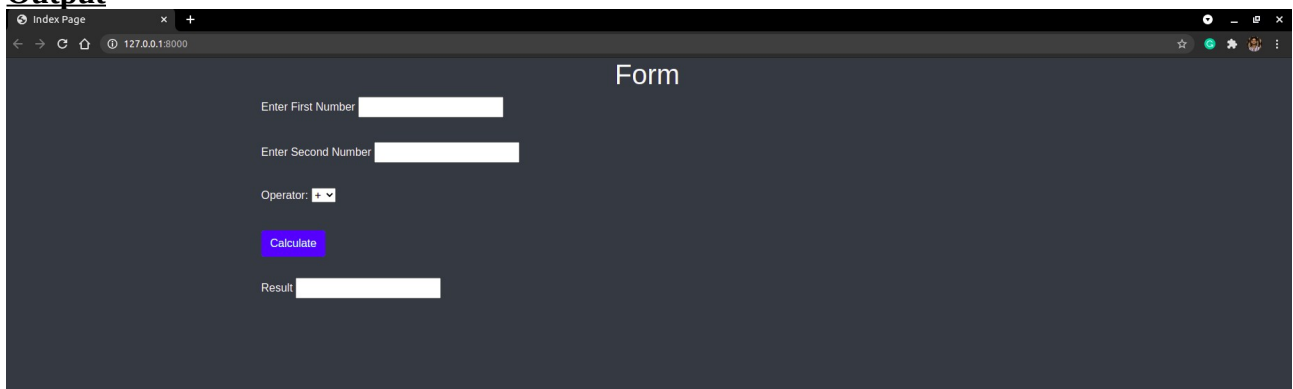
```

```

</html>

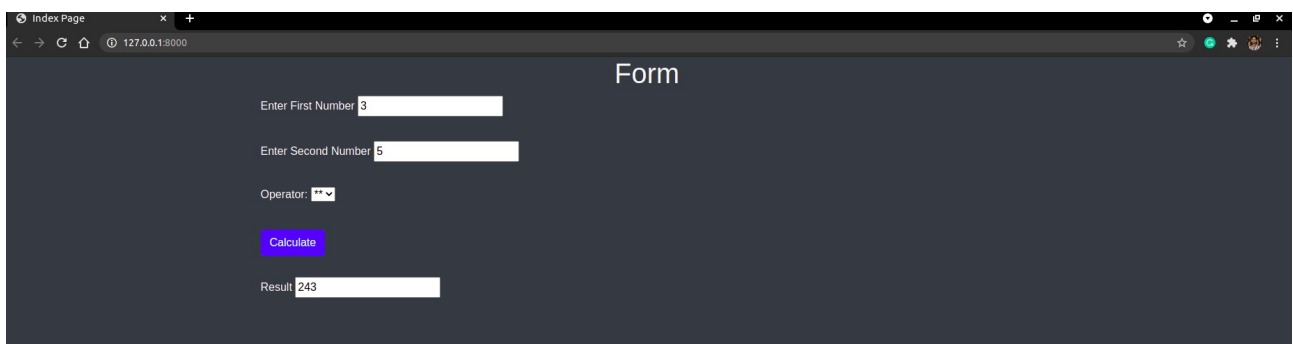
```

## Output



A screenshot of a web browser window titled 'Index Page' showing a form titled 'Form'. The form is displayed on a dark background. It contains the following elements:

- 'Enter First Number' followed by a text input field.
- 'Enter Second Number' followed by a text input field.
- 'Operator:' followed by a dropdown menu showing 'x'.
- A blue 'Calculate' button.
- 'Result' followed by a text input field.



A second screenshot of the same web browser window, showing the form after the calculation. The input fields now contain the following values:

- 'Enter First Number' input field contains the number '3'.
- 'Enter Second Number' input field contains the number '5'.
- 'Operator:' dropdown menu shows '\*\*'.
- The blue 'Calculate' button remains visible.
- 'Result' input field contains the number '243'.

Index Page

127.0.0.1:8000

Form

Enter First Number

3

Enter Second Number

5

Operator:

+ ▼

Calculate

Result

8