

a) GET API (Sum):

Create a GET API endpoint in Django that takes two numbers as query parameters and returns their sum.

.....Views.py.....

```
from django.shortcuts import render
from django.http import HttpResponse

# Create your views here.

def home(request):
    return render(request, 'home.html', {'name': 'Madhu'})

def add(request):

    val1 = int(request.GET['num1'])
    val2 = int(request.GET['num2'])
    res = val1 + val2

    return render(request, "result.html", {'result': res})
```

.....index.html.....

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

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <meta http-equiv="X-UA-Compatible" content="ie=edge">
    <title>Add</title>
</head>

<body bgcolor="pink">

    {% block content %}

    {% endblock %}

</body>

</html>
```

.....home.html.....

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

{% block content %}
<h1>Hello {{name}}!!!!</h1>
<h2>Add two number:-</h2>

<form action="add">

    Enter 1st number : <input type="text" name="num1"><br>
    Enter 2st number : <input type="text" name="num2"><br>
    <input type="submit">
</form>

{% endblock %}
```

.....result.html.....

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

{% block content %}

Result : {{result}}

{% endblock %}
```

.....urls.py calc.....

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

urlpatterns = [
    path('', views.home, name='home'),
    path('add', views.add, name='add')
]
```

.....urls.py hello.....

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

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

Output:

Hello Madhu!!!!

Add two number:-

Enter 1st number :

Enter 2st number :

Result : 30

b) POST API (Difference):

Create a POST API endpoint in Django that takes two numbers in the request body and returns their difference.

.....views.py.....

```
from django.shortcuts import render
from django.http import HttpResponse

# Create your views here.

def home(request):
    return render(request, 'calculate.html', {'name': 'Madhu'})

def subtract(request):

    val1 = int(request.POST['num1'])
    val2 = int(request.POST['num2'])
    res = val1-val2

    return render(request, "result.html", {'result': res})
```

.....index.html.....

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

<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <meta http-equiv="X-UA-Compatible" content="ie=edge">
    <title>MyApp</title>
</head>

<body bgcolor="pink">

    {% block content %}

    {% endblock %}

</body>

</html>
```

.....calculate.html.....

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

{% block content %}
<h1>Hello {{name}}!!!!</h1>
<h2>Difference two number:</h2>

<form action="subtract" method="POST">
    {% csrf_token %}

    Enter First number : <input type="text" name="num1"><br>
    Enter Second number : <input type="text" name="num2"><br>
    <input type="submit">
</form>

{% endblock %}
```

.....result.html.....

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

{% block content %}

Result : {{result}}

{% endblock %}
```

.....urls.py sub.....

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

urlpatterns = [
    path('', views.home, name='calculate'),
    path('subtract', views.subtract, name='subtract')
]
```

.....urls.py home.....

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

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

Output:

Hello Madhu!!!!

Differnce two number:

Enter First number :

Enter Second number :

Result : 5