

Download the Zip File from the google drive

<https://drive.google.com/file/d/1eW0Q8e5gOZ2Q87coPfYRC0PWil0cHFTs/view?usp=sharing>

Go to your desired directory where you have saved the simple\_calculator folder by unzipping the zip file

After doing the above steps follow the below commans in the vs code termibal

```
python3 -m venv venv
```

```
source venv/bin/activate
```

```
pip install starlette uvicorn
```

Install the ios 26.1 simulator on your system(Xcode)

Run Python Server (Terminal 1)

```
source venv/bin/activate
```

```
python main.py
```

Run Flutter App (Terminal 2)

1. Terminal → New Terminal
2. Run:

```
open -a Simulator
```

```
flutter run
```

Test the calculator app

```
lib > main.dart > ...
1 import 'package:flutter/material.dart';
2 import 'package:http/http.dart' as http;
3 import 'dart:convert';
4
5 Run | Debug | Profile
6 void main() => runApp(const MyApp());
7
8 class MyApp extends StatelessWidget {
9   const MyApp({super.key});
10  @override
11  Widget build(BuildContext context) {
12    return MaterialApp(home: const CalcScreen());
13  }
14 }
15
16 class CalcScreen extends StatefulWidget {
17   const CalcScreen({super.key});
18   @override
19   State<CalcScreen> createState() => _CalcScreenState();
20 }
21
22 class _CalcScreenState extends State<CalcScreen> {
23   String output = "0";
24   String a = "0", b = "0", op = "";
25
26   void press(String text) async {
27     setState(() {
28       if (text == "C") {
29         output = "0"; a = "0"; b = "0"; op = "";
30       } else if (text == "+") {
31         a = output; op = text; output = "0";
32       } else if (text == "-") {
33         b = output;
34         http.post(
35           Uri.parse("http://127.0.0.1:8000/calc"),
36           headers: {"Content-Type": "application/json"},
37           body: jsonEncode({"a": double.parse(a), "b": double.parse(b), "op": op}),
38         ).then((resp) {
39           final data = jsonDecode(resp.body);
40           setState(() => output = data["result"]);
41         }).catchError((e) => setState(() => output = "Error"));
42       } else {
43         output = output == "0" ? text : output + text;
44       }
45     });
46   }
47 }
```

```
main.py > ...
1 # main.py
2 from starlette.applications import Starlette
3 from starlette.responses import JSONResponse
4 from starlette.routing import Route
5 import uvicorn
6
7 async def calculate(request):
8   data = await request.json()
9   a = float(data["a"])
10  b = float(data["b"])
11  op = data["op"]
12
13  if op == "+": result = a + b
14  elif op == "-": result = a - b
15  elif op == "*": result = a * b
16  elif op == "/": result = a / b if b != 0 else "Error"
17  else: result = "Error"
18
19  return JSONResponse({"result": str(result)})
20
21 app = Starlette(routes=[Route("/calc", calculate, methods=["POST"])])
22
23 if __name__ == "__main__":
24   uvicorn.run(app, host="127.0.0.1", port=8000)
```

