

Assignment No. 7

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BE-(IT)

Subject: LP-V (Distributed System)

Code: app.py

```
1. from flask import Flask, request, jsonify
2.
3. app = Flask(__name__)
4.
5. @app.route('/add', methods=['POST'])
6. def add():
7.     data = request.get_json()
8.     num1 = data['num1']
9.     num2 = data['num2']
10.    num3 = num1 + num2
11.    return jsonify({"result": num3})
12.
13. @app.route('/multiply', methods=['POST'])
14. def multiply():
15.     data = request.get_json()
16.     num1 = data['num1']
17.     num2 = data['num2']
18.     num3 = num1*num2
19.     return jsonify({"result": num3})
20.
21. if __name__ == '__main__':
22.     app.run(debug=True)
23.
```

client.py

```
1. import requests
2.
3. url = 'http://127.0.0.1:5000/'
4.
5. def add_num(num1 , num2 ):
6.     endpoint = url + '/add'
7.     data = {"num1":num1, "num2":num2}
8.     response = requests.post(endpoint, json=data)
9.     result = response.json()['result']
10.    return result
11.
12. def multiply_num(num1, num2):
13.     endpoint = url + '/multiply'
14.     data = {"num1": num1, "num2": num2}
15.     response = requests.post(endpoint, json=data)
16.     result = response.json()["result"]
17.     return result
18.
19. state = True
20. while(state):
21.     try:
22.         print("Enter the first number:")
23.         num1 = int(input())
24.         print("Enter the second number:")
25.         num2 = int(input())
26.
27.         print("Do you want \n1.Add \n2. Multiply \n3. Exit")
28.         choice = int(input(""))
29.         if(choice==1):
30.             print(add_num(num1, num2))
31.             print("Do you wish to continue? (Yes, No)")
32.             if (input().lower()=="no"):
```

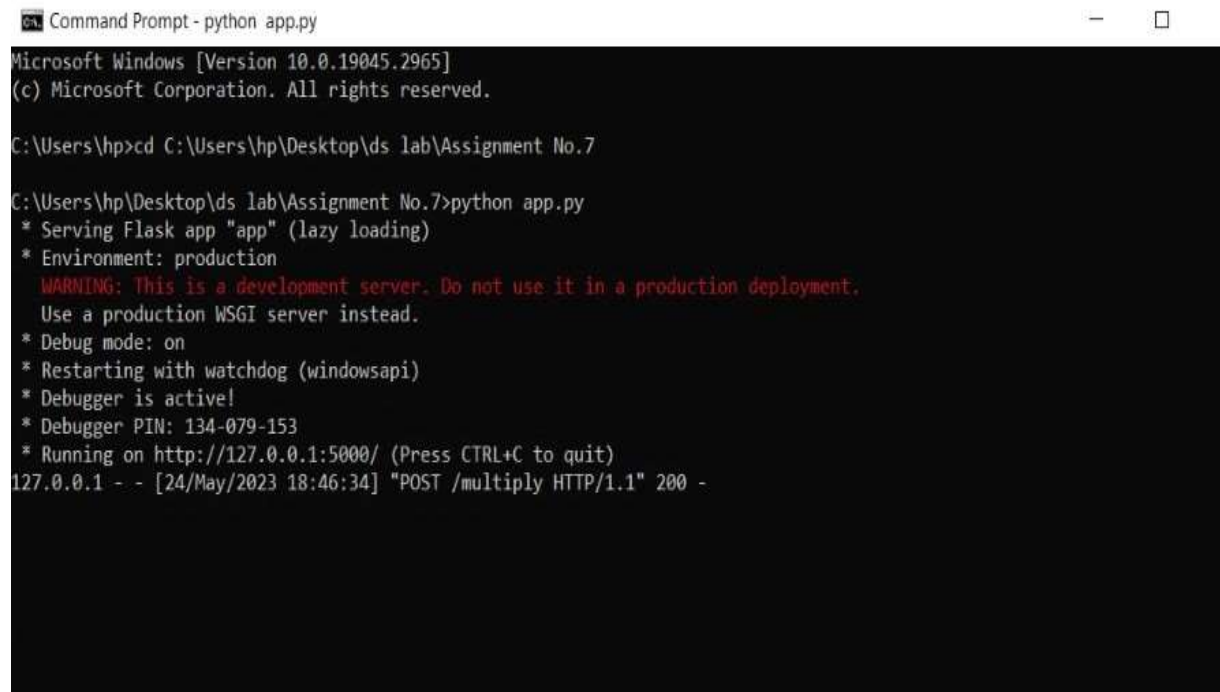
```

38.         if (input().lower()=="no"):
39.             state=False
40.     elif(choice==3):
41.         print("Thank you for using the service")
42.         state=False
43.     else:
44.         print("Invalid Input")
45.     if(state):
46.         print("New Calculation")
47.         print("_"*10,end="\n")
48. except:
49.     print("Encountered Error")
50.     print("Restarting interface", end="\n")
51.

```

Output:

app.py:



```

Command Prompt - python app.py

Microsoft Windows [Version 10.0.19045.2965]
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C:\Users\hp>cd C:\Users\hp\Desktop\ds lab\Assignment No.7

C:\Users\hp\Desktop\ds lab\Assignment No.7>python app.py
* Serving Flask app "app" (lazy loading)
* Environment: production
  WARNING: This is a development server. Do not use it in a production deployment.
  Use a production WSGI server instead.
* Debug mode: on
* Restarting with watchdog (windowsapi)
* Debugger is active!
* Debugger PIN: 134-079-153
* Running on http://127.0.0.1:5000/ (Press CTRL+C to quit)
127.0.0.1 - - [24/May/2023 18:46:34] "POST /multiply HTTP/1.1" 200 -

```

client.py:

```
Command Prompt - python client.py
Microsoft Windows [Version 10.0.19045.2965]
(c) Microsoft Corporation. All rights reserved.

C:\Users\hp>cd C:\Users\hp\Desktop\ds lab\Assignment No.7

C:\Users\hp\Desktop\ds lab\Assignment No.7>python client.py
Enter the first number:
5
Enter the second number:
8
Do you want to:
1. Add
2. Multiply
3. Exit
2
40
Do you wish to continue? (Yes, No)

```