

Instructions to run code:

- Server program from command line: (Ex:sudo pyhton3 server1.py)
- Client program as : (sudo pyhton3 client.py localhost 12345) {port number same every time hardcoded in server, but program can be easily modified to take user input port, however will work across devices if on same network, and traffic on port is allowed}
- Provide input as asked on client side, two types on input:

```
.../s/c/2/tut03 (main) sudo python3  
client.py localhost 12345  
Password:  
Thank you for connecting  
Provide your input:  
█
```

```
.../s/c/2/tut03 (main) sudo python3  
client.py localhost 12345  
Password:  
Thank you for connecting  
Provide your input:  
5/6  
Response: 0.8333333333333334  
Do you wish to Continue?(y/n)  
█
```

- Client closes on providing n as input
- Server closes only after ctrl+c

Sample Inputs:

```
Thank you for connecting
Provide your input:
3+4+5
Response: 12
Do you wish to Continue?(y/n)
█
```

```
Thank you for connecting
Provide your input:
5-4
Response: 1
Do you wish to Continue?(y/n)
█
```

```
Thank you for connecting
Provide your input:
6%4
Response: 2
Do you wish to Continue?(y/n)
█
```

```
6%4
Response: 2
Do you wish to Continue?(y/n)
yes
Do you wish to Continue?(y/n)
█
```

```
Thank you for connecting
Provide your input:
5*6
Response: 30
Do you wish to Continue?(y/n)
```

```
y
Thank you for connecting
Provide your input:
```

```
Thank you for connecting
Provide your input:
4/5
Response: 0.8
Do you wish to Continue?(y/n)
```

```
n
...Book-Air ~/S/s/c/2/tut03 (main):
```

PS: Used eval() function, so anything that follows bodmas will work, if invalid then:

```
Thank you for connecting
Provide your input:
moo
Response: Invalid input format
Do you wish to Continue?(y/n)
sc
```

Server Log example:

```
Socket successfully created
socket binded to 12345
Socket is listening..
Got connection from ('127.0.0.1', 60439)
Client ('127.0.0.1', 60439) 5/6
Response ('127.0.0.1', 60439) 0.8333333333333334
Client ('127.0.0.1', 60439) 3+4+5
Response ('127.0.0.1', 60439) 12
Client ('127.0.0.1', 60439) 5-4
Response ('127.0.0.1', 60439) 1
Client ('127.0.0.1', 60439) 6%4
Response ('127.0.0.1', 60439) 2
Client ('127.0.0.1', 60439) 5*6
Response ('127.0.0.1', 60439) 30
Client ('127.0.0.1', 60439) 4/5
Response ('127.0.0.1', 60439) 0.8
Connection closed with client ('127.0.0.1', 60439)
```

For echo server client:

```
Thank you for connecting
Provide your input:
4/5
Response: 4/5
Do you wish to Continue?(y/n)
y
y
6/7
Response: 6/7
Do you wish to Continue?(y/n)
y
y
4%5
Response: 4%5
Do you wish to Continue?(y/n)
y
y
moo
Response: moo
Do you wish to Continue?(y/n)
n
...shagras-MacBook-Air ~/S/s/c/2/tut03 (main)>
```