

Socket Programming Assignment

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Part 1: Single process server

- The code of this is in file named server1.c
- It takes the port number from the command line and a listening socket
- Whenever a client request arrives on that socket, the server accepts the connection, read the clients request and return the result
- After replying for one message the server waits for the next message from the client
- Once the client is terminated the server waits for another client
- Server terminates on Ctrl+C
- This server does not handle multiple clients
- After the termination of the first client only the next will succeed

Running Client

- Make the file executable with

```
gcc client.c -o client
```
- Now run it with

```
./client 127.0.0.1 5555
```

Running Server

- Make the file executable with

```
gcc server1.c -o server1
```
- Now run it with

```
./server1 5555
```

Part 2: Multi-process / Multi-threaded server

- The code of this is in file named server2.c
- It handles several clients simultaneously
- Performs the calculations as the same way as the server1

Running Server

- Make the file executable with
`gcc server2.c -o server2`
- Now run it with
`./server2 5555`