COMP 7005
Assignment 2
User Guide

Winston Nguyen
A01297231
Feb 11th, 2024

Purpose

- A program with a server and client to send and receive data to be analyzed and show how to handle multiple connections.

Installing

Obtaining

```
git clone https://github.com/Wontoni/comp7005-network-socket.git
```

Running

```
python3 ./source/server.py

python3 ./source/client.py <file_name>.txt
```

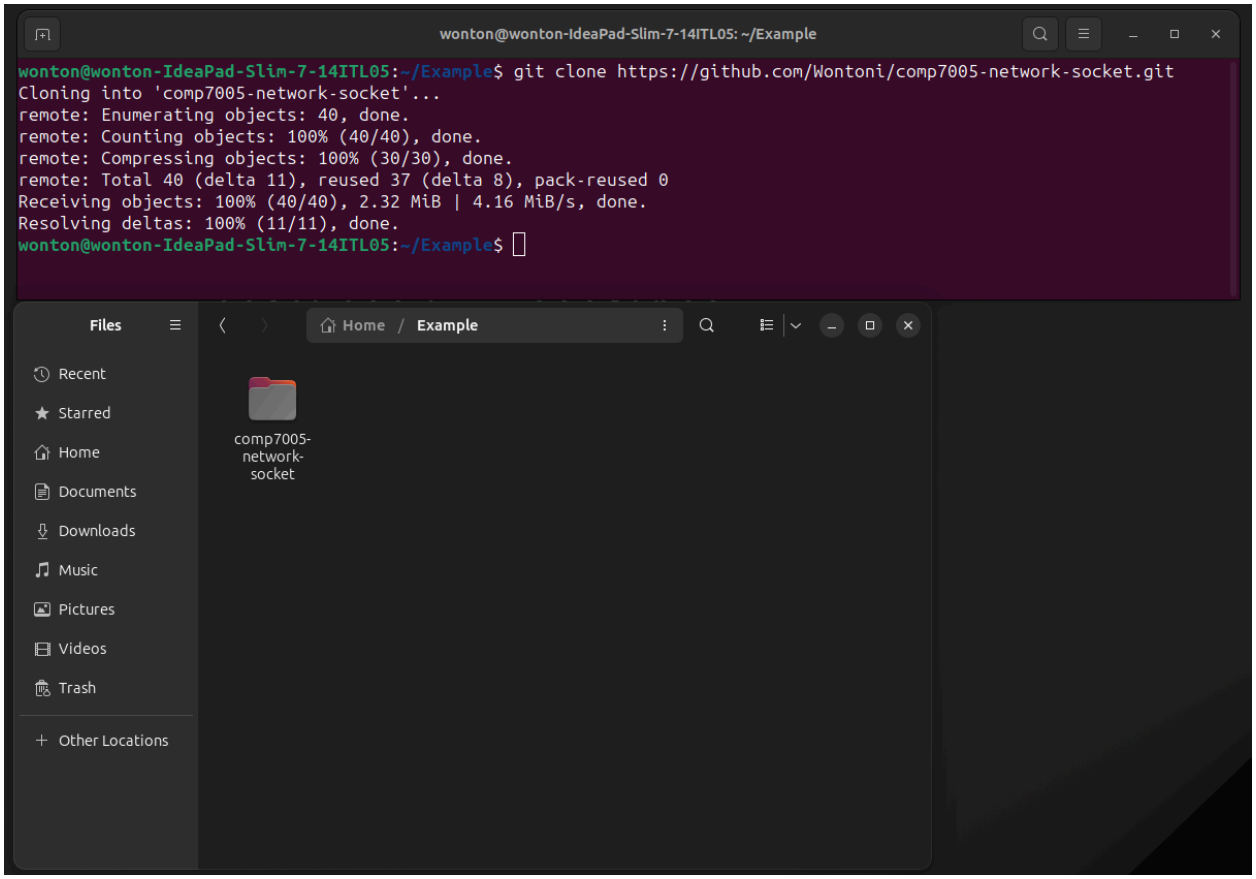
Command Line Arguments

The following configuration values can be set in ./source/client.py:

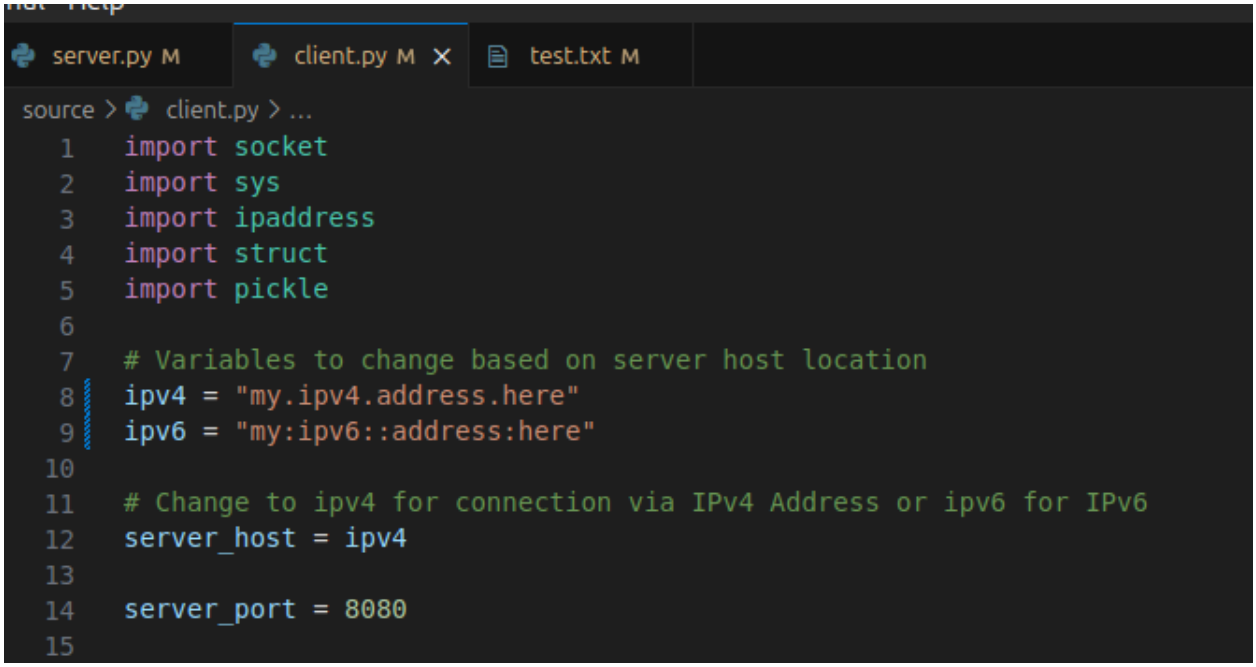
Variable	Purpose
<file_name>	The text file containing the data to send to the server and analyze.
<ip_address>	The ip address of the server to connect with.

Examples

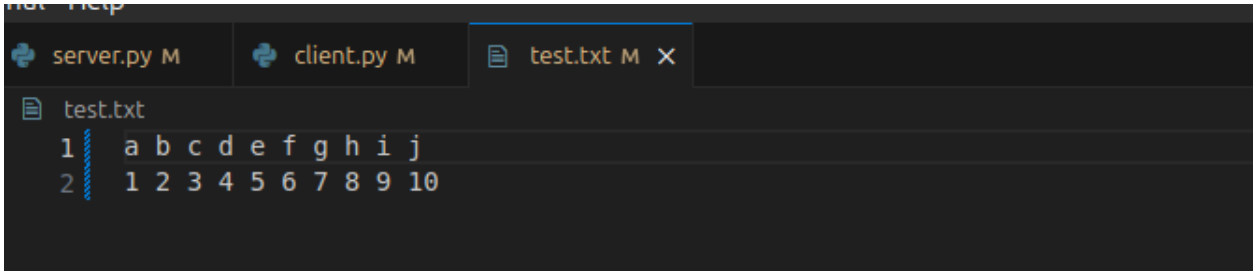
Cloning Repository



Setting IPv4 and IPv6 Addresses



Example Data



Running the Programs

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

wonton@wonton-IdeaPad-Slim-7-14ITL05:~/work/comp7005/Assignment 2: Network Sockets$ python3 ./source/server.py
Server running on dual-stack mode (IPv4 and IPv6).
Server is listening on port 8080 for incoming connections...
```

```
PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  PORTS

wonton@wonton-IdeaPad-Slim-7-14ITL05:~/work/comp7005/Assignment 2: Network Sockets$ python3 ./source/client.py test.txt
Received response
Word Count: 20
Character Count: 21
Character Frequencies:
0: 1
1: 2
2: 1
3: 1
4: 1
5: 1
6: 1
7: 1
8: 1
9: 1
a: 1
b: 1
c: 1
d: 1
e: 1
f: 1
g: 1
h: 1
i: 1
j: 1

wonton@wonton-IdeaPad-Slim-7-14ITL05:~/work/comp7005/Assignment 2: Network Sockets$
```