

## 1A. HOW TO RUN CODE

STEP 1) Run "python server.py" (DO NOT QUIT PROGRAM)

## STEP 2) Run “python client.py”

STEP 3) Finally the client should display “CONNECTION SUCCESSFUL” and the server should say the client is connected to your address.

STEP 4) You will now be able to send messages to the client and server. Make sure you send a message to the client first then the server next and so on and so on

### 1B. SCREENSHOT OF RUNNING CODE

```
DEBUG CONSOLE PROBLEMS OUTPUT TERMINAL
PS C:\Users\vdcam\Documents\GitHub\Project_4_Client_Server_Chat> python client.py
CONNECTION SUCCESSFUL
CLIENT message: hi
whats up
CLIENT message: nothing much
nothing much
CLIENT message: cool cool

CLIENT message: did you just send nothing as a message and not get an error???
yeah I literally just press the enter key
CLIENT message: what about if I type a lot of text like aa looottt will it still work?
yeah!
CLIENT message: wow this program is so cool
alright Im gonna go now
CLIENT message: ok bye
cya!
CLIENT message: /q
connection has been closed
PS C:\Users\vdcam\Documents\GitHub\Project_4_Client_Server_Chat> python client.py
Traceback (most recent call last):
  File "client.py", line 6, in <module>
    sock.connect(('localhost', 1337)) # connected localhost to port 1337
ConnectionRefusedError: [WinError 10061] No connection could be made because the target machine actively refused it

PS C:\Users\vdcam\Documents\GitHub\Project_4_Client_Server_Chat> python client.py
CONNECTION SUCCESSFUL
CLIENT message: ok I just wanna tell you something
what is it?
CLIENT message: nothing lol ok you hang up now
ok bye
CLIENT message: cya
connection has been closed
PS C:\Users\vdcam\Documents\GitHub\Project_4_Client_Server_Chat> []

Windows PowerShell
Copyright (C) Microsoft Corporation. All rights reserved.

Try the new cross-platform PowerShell https://aka.ms/pscore6

PS C:\Users\vdcam\Documents\GitHub\Project_4_Client_Server_Chat> python server.py
CONNECTED TO: ('127.0.0.1', 63627)
hi
SERVER message: whats up
nothing much
SERVER message: nothing much
cool cool
SERVER message:
did you just send nothing as a message and not get an error???
SERVER message: yeah I literally just press the enter key
what about if I type a lot of text like aa looottt will it still work?
SERVER message: yeah!
wow this program is so cool
SERVER message: alright Im gonna go now
ok bye
SERVER message: cya!
connection has been closed
PS C:\Users\vdcam\Documents\GitHub\Project_4_Client_Server_Chat> python server.py
CONNECTED TO: ('127.0.0.1', 63629)
ok I just wanna tell you something
SERVER message: what is it?
nothing lol ok you hang up now
SERVER message: ok bye
cya
SERVER message: /q
connection has been closed
PS C:\Users\vdcam\Documents\GitHub\Project_4_Client_Server_Chat> []
```

```

PS C:\Users\vdcan\Documents\Github\Project_4_Client_Server_Chat> python client.py
CONNECTED SUCCESSFUL
CLIENT message: hello this is a test
nice test there
CLIENT message: my thank you!
SERVER message:
PS C:\Users\vdcan\Documents\Github\Project_4_Client_Server_Chat> python server.py
CONNECTED TO : (127.0.0.1, 63780)
hello this is a test
SERVER message: nice test there
my thank you!
SERVER message:

```

### 1C. COMMENT/QUESTIONS

I do have a question regarding extra credit. I considered taking the case where if the input is empty then the program should not quit and is sent out as a message. I did this by appending a `header_size` length at the front of the message. Then I can split the size of the message from the data such that I know how long the message will be if the data is not complete. Well my question is if that counts as extra credit?

**2A. SOURCES USED**

CITED SOURCES: LOCATED ON CLIENT.PY

**2B. COMMENTED CODE**

Code has been commented on both client.py and server.py