

You will build TWO Python programs.

One will be a server. One will be a client.

The two programs will communicate with each other using TCP sockets running on top of IP addresses. You will not have to do it, but the sockets library module will build IP headers and TCP headers on your data.

Build them first in Pycharm or any editor and save them in the same folder calling one server.py and the other client.py.

You will need to run them outside of Pycharm by using the Command Prompt to start an instance of Python for each. Start the server first so it listens, then fire up the client.

<https://realpython.com/python-sockets/>

[This video explains how to do this.](#)

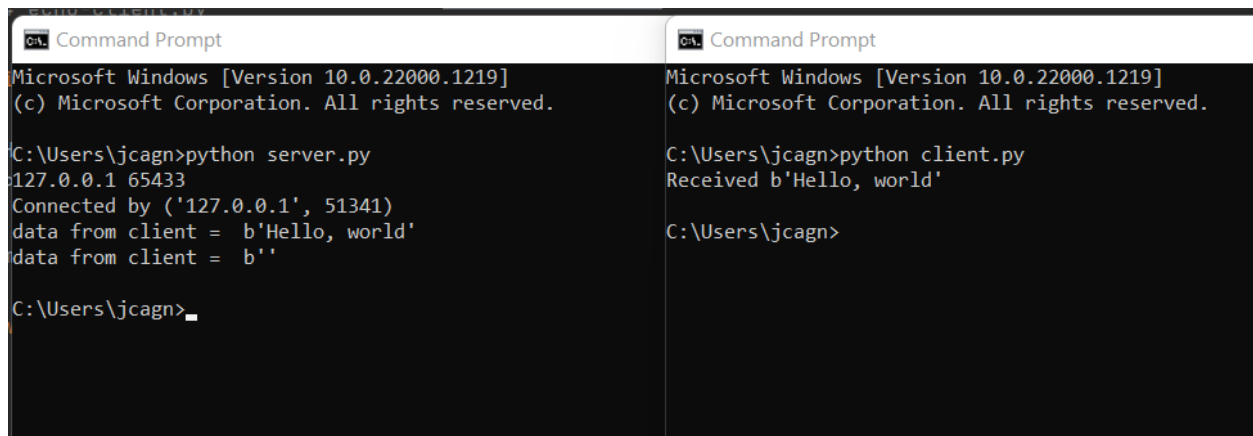
[Another video explaining how to do this.](#)

You can use EITHER of the two examples above. You can just follow what they are doing to complete it using their code.

When you get your scripts to work, copy them into a text editor such as Notepad on a PC or textedit on a Mac (not Word as Word adds characters). This way I can copy it, paste it into my IDE and run them.

You can just copy all the scripts one after another into the same text edit file and then submit the completed text edit file under the “**Python - Week 7**” tab in this module.

Include a snip of your client and server talking to each other (see below).



```
Command Prompt
Microsoft Windows [Version 10.0.22000.1219]
(c) Microsoft Corporation. All rights reserved.

C:\Users\jcagn>python server.py
127.0.0.1 65433
Connected by ('127.0.0.1', 51341)
data from client = b'Hello, world'
data from client = b''

C:\Users\jcagn>

Command Prompt
Microsoft Windows [Version 10.0.22000.1219]
(c) Microsoft Corporation. All rights reserved.

C:\Users\jcagn>python client.py
Received b'Hello, world'

C:\Users\jcagn>
```