

Note 4: Try to get your partner's IP address and make your client send a message to his/her server. Are you able to send the message? If no, why is that? What do you need to do to make it work? Support your answers with screenshots.

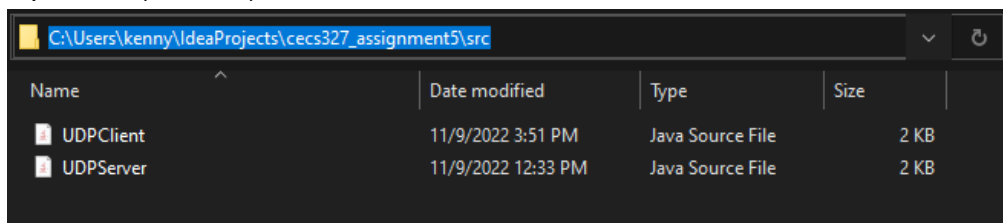
I could not connect to my partner's server as they are connected to CSULB's network as they dorm there. However, I was able to Port Forward on my network and successfully host the server that they connected to.

Instructions for Users:

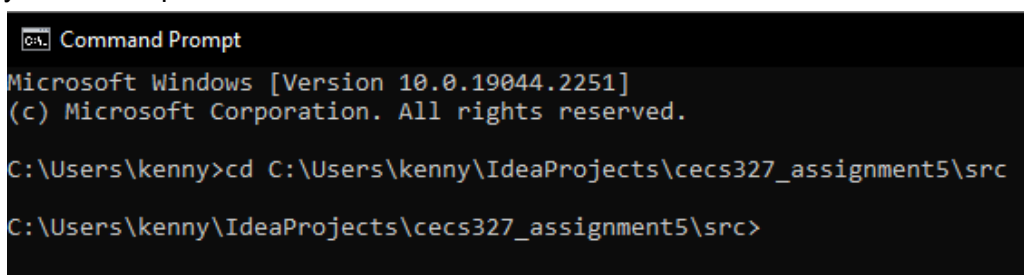
BEFORE YOU BEGIN:

Please ensure that you have Java JDK installed: This will be needed to compile the java files. It can be found at the following link: <https://www.oracle.com/java/technologies/downloads/>

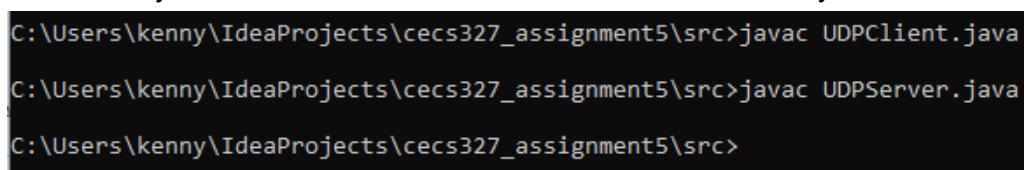
1. Open your Command Prompt (CMD)
2. Locate the directory in which the two java files can be found. Copy the directory to your clipboard. (Ctrl + C)



3. On your CMD, type "cd {copied directory}". For the second field, paste the directory that you have copied.



4. In CMD, type "javac UDPCClient.java" and press enter. Do the same for "javac UDPServer.java". You will then see two new files in the directory.



Name	Date modified	Type	Size
UDPCClient.class	11/13/2022 7:46 PM	CLASS File	3 KB
UDPCClient	11/9/2022 3:51 PM	Java Source File	2 KB
UDPServer.class	11/13/2022 7:46 PM	CLASS File	3 KB
UDPServer	11/9/2022 12:33 PM	Java Source File	2 KB

5. To run the UDP Server, type “java UDPServer.java” in your CMD and press enter.

```
C:\Users\kenny\IdeaProjects\cecs327_assignment5\src>java UDPServer.java
Please enter a Port Number for the server:
_
```

You will see this. Then, enter a port that is unused. In this case, we will use ‘123’.

6. In another instance of Command Prompt, repeat step 3.
 - a. To run the UDP Client, type “java UDPCClient.java” in the CMD and press enter.

```
Command Prompt - java UDPCClient.java
Microsoft Windows [Version 10.0.19044.2251]
(c) Microsoft Corporation. All rights reserved.

C:\Users\kenny>cd C:\Users\kenny\IdeaProjects\cecs327_assignment5\src

C:\Users\kenny\IdeaProjects\cecs327_assignment5\src>java UDPCClient.java
Please enter the IP Address of the server:
```

7. For the IP address, we will be connecting to the same local computer. To find the local IP address, type “ipconfig” in another Command Prompt window and locate your IPv4 address.

```
Select Command Prompt
C:\Users\kenny>ipconfig

Windows IP Configuration

Ethernet adapter Ethernet:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . :

Ethernet adapter Ethernet 2:

    Connection-specific DNS Suffix  . : attlocal.net
    Link-local IPv6 Address . . . . . : fe80::52d1:70c3:dae8:c12b%16
    IPv4 Address. . . . . : 192.168.0.64
    Subnet Mask . . . . . : 255.255.255.0
    Default Gateway . . . . . : 192.168.0.254
```

Type this IP address in the Command Prompt running UDPCClient, followed by the port number we entered in UDPServer (123).

```
C:\Users\kenny\IdeaProjects\cecs327_assignment5\src>java UDPClient.java
Please enter the IP Address of the server:
192.168.0.64
Please enter the Port Number of the server:
123
Enter a message to send to the server:
_
```

8. Type a message into the UDPClient and press enter. You should then see the same message sent back, with the exception of it being in capitalized form.

```
Please enter the Port Number of the server:
123
Enter a message to send to the server:
hello world!
Reply: HELLO WORLD!

Enter a message to send to the server:
_
```

You will be prompted to send another message to the server. This will repeat forever, so whenever you are done using the program, simply exit the CMD, or press (CTRL + C).

Also, on the Command Prompt for UDPServer, you will be able to see the messages that the server is receiving from the UDPClient.

```
C:\> Command Prompt - java UDPServer.java
Please enter a Port Number for the server:
123
Client Message: hello world!
```