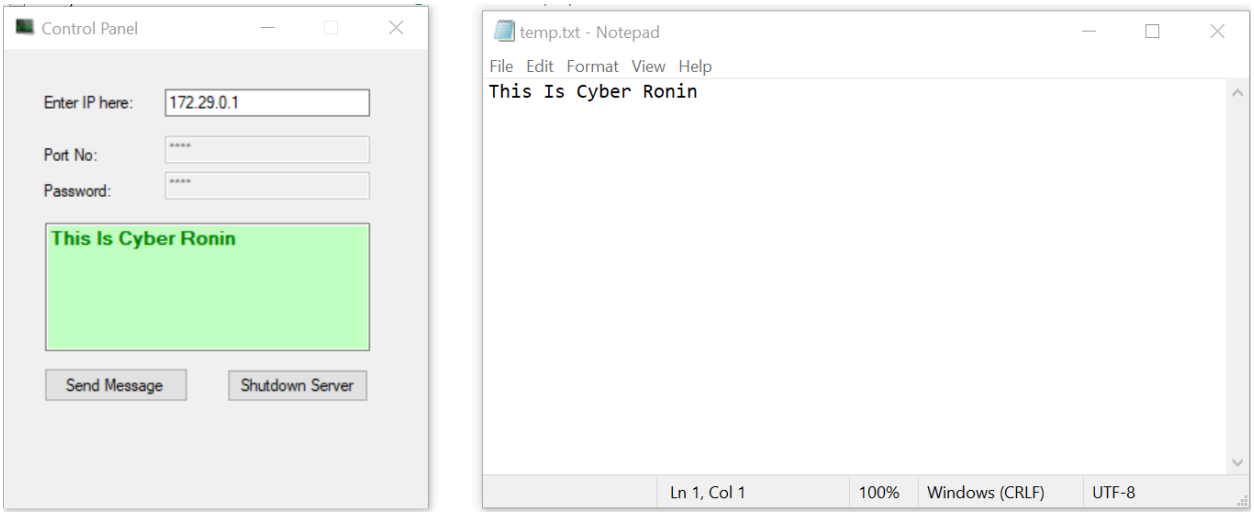
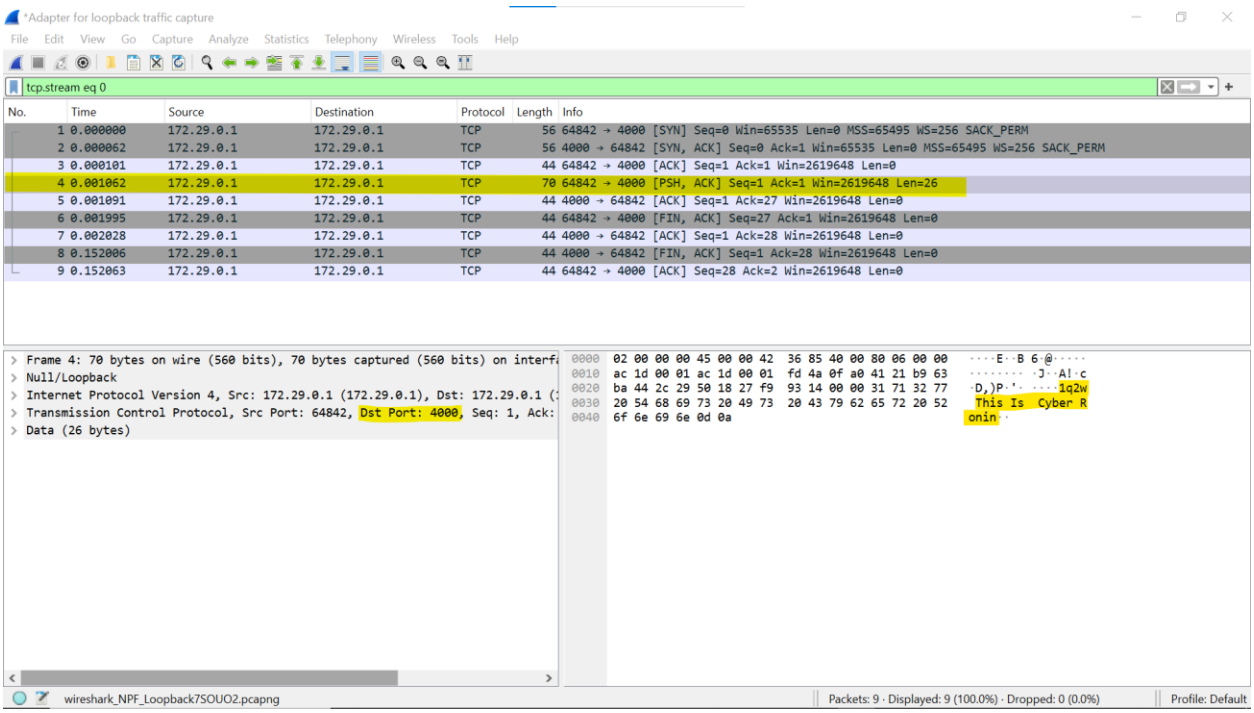
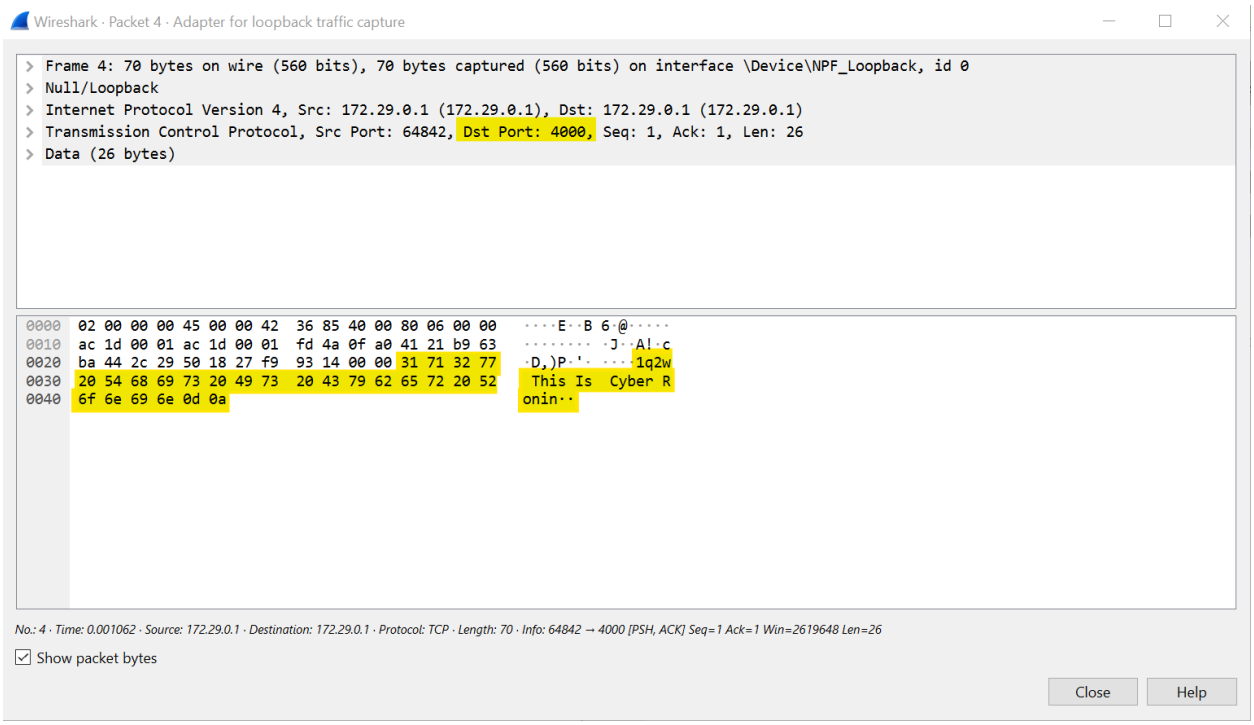
The **ClientAssignII.exe** and **ServerAssignII.exe**, both are running on **localhost**.



Below is the screen shot of the packet send form the **ClientAssignII.exe** to **ServerAssignII.exe** in **Wireshark**:





From the picture we can see:

Task 1:

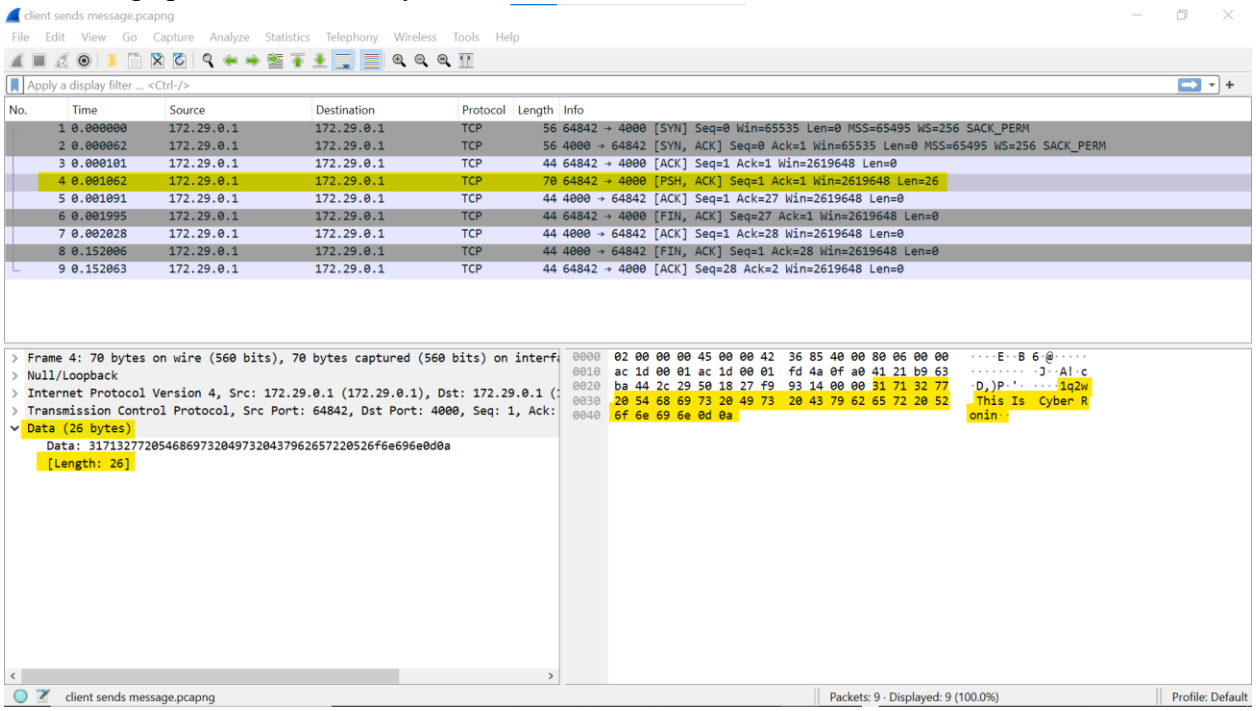
That **password** is : **1q2w**

Task 2:

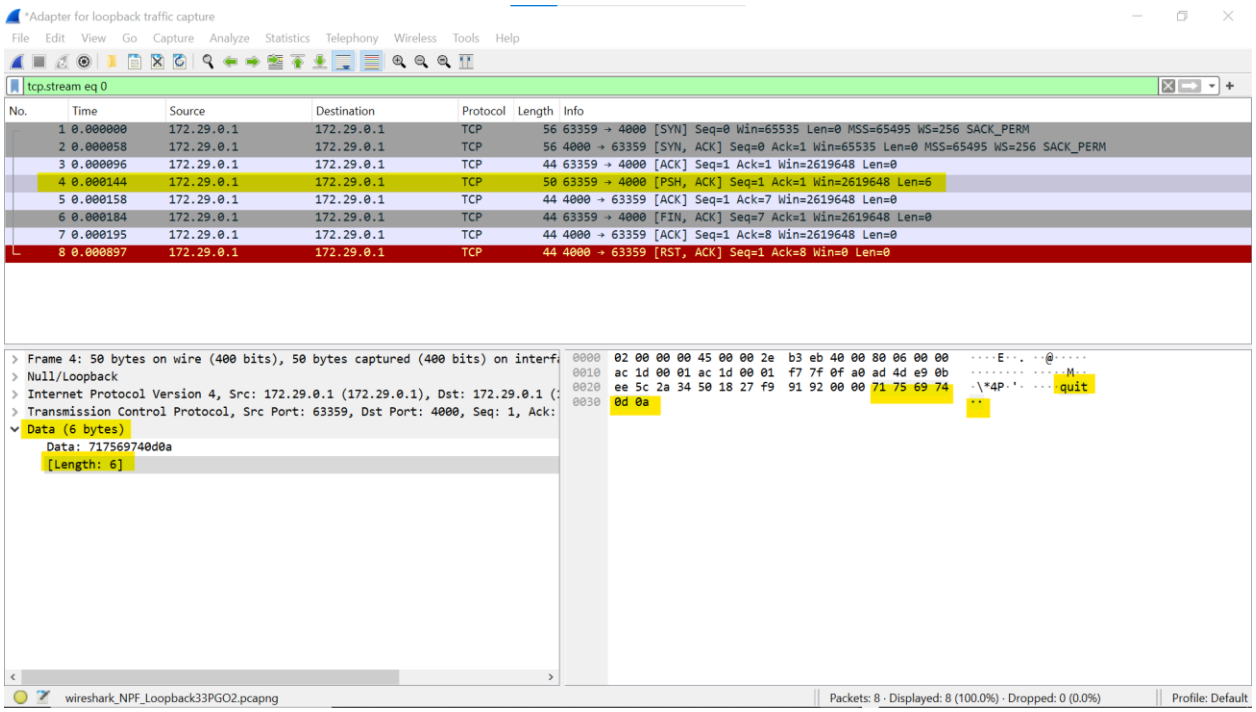
And **Destination port** is : **4000**

Task 3:

i. the message packet size is 26 bytes



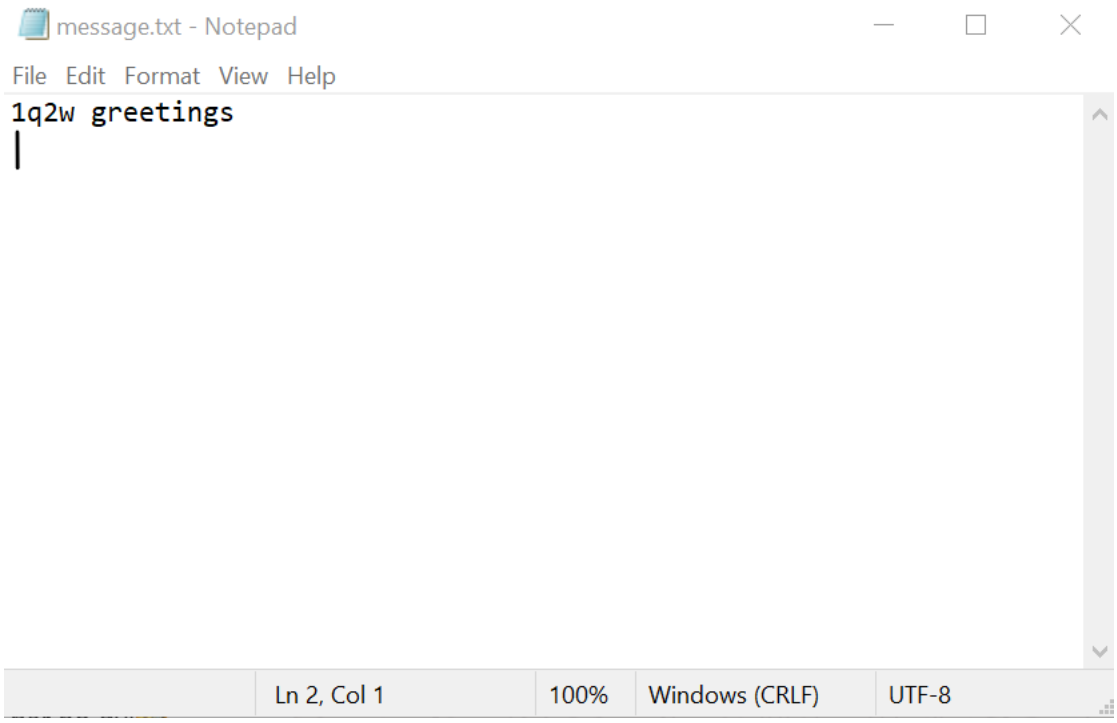
ii. for shutdown packet size is 6 bytes

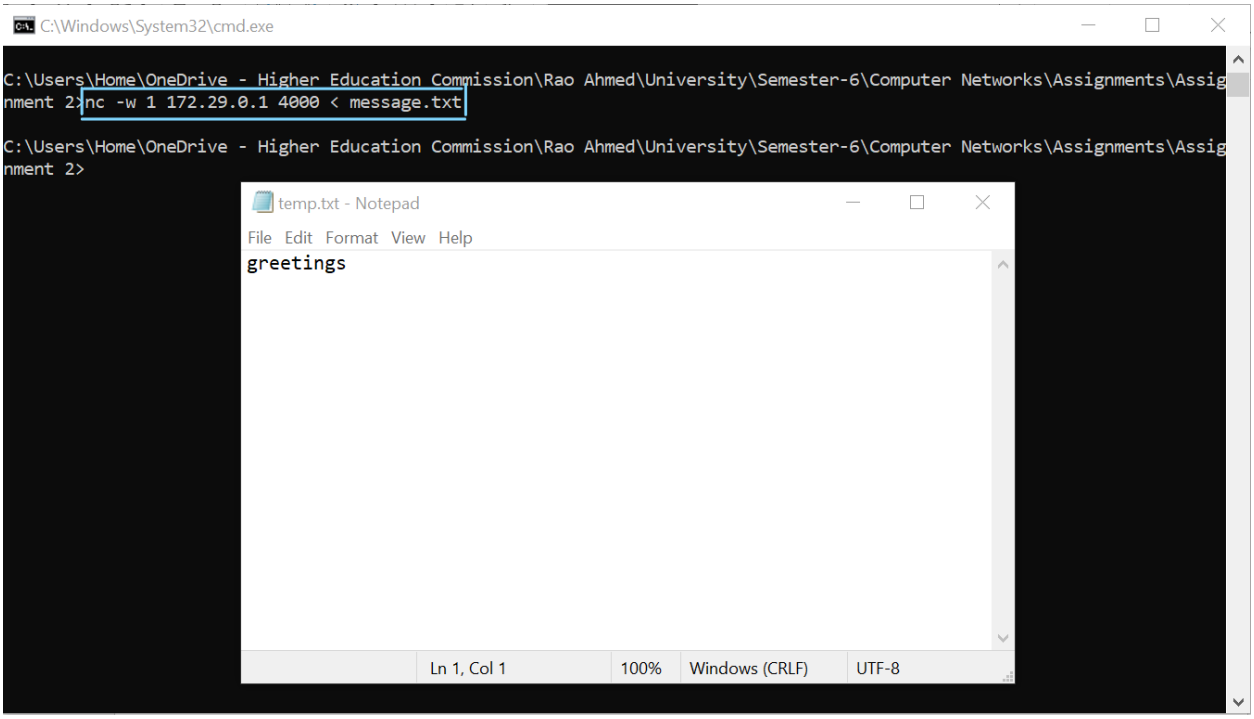


Task 4:

Now using **NetCat**, I will send the message instead of using the **ClientAssignII.exe** program. There are multiple ways to do so;

Method 1: Enter the new line in the **message.txt** (the file which contains message to be send). In this case you do not need to mention the **-c flag**.





Command: the command in this case is

nc -w 1 172.29.0.1 4000 < message.txt

Command break down:

nc: it is the netcat tool

-w 1: this flag set a 1 second timeout for the connection.

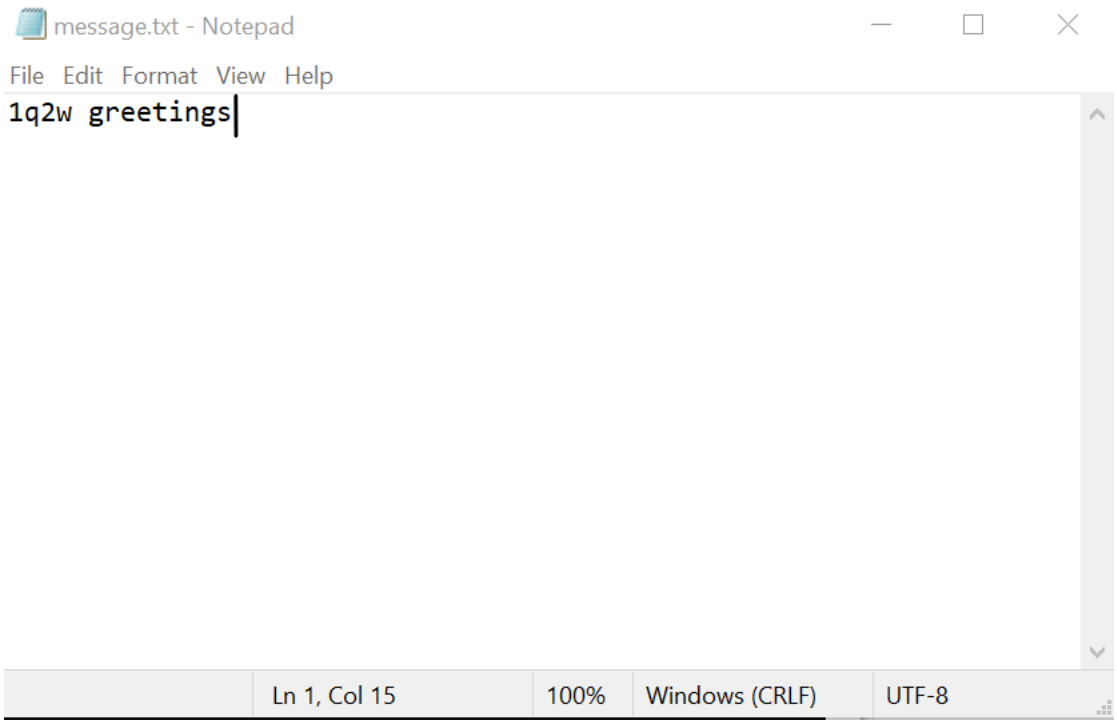
172.29.0.1: The IP address to connect to

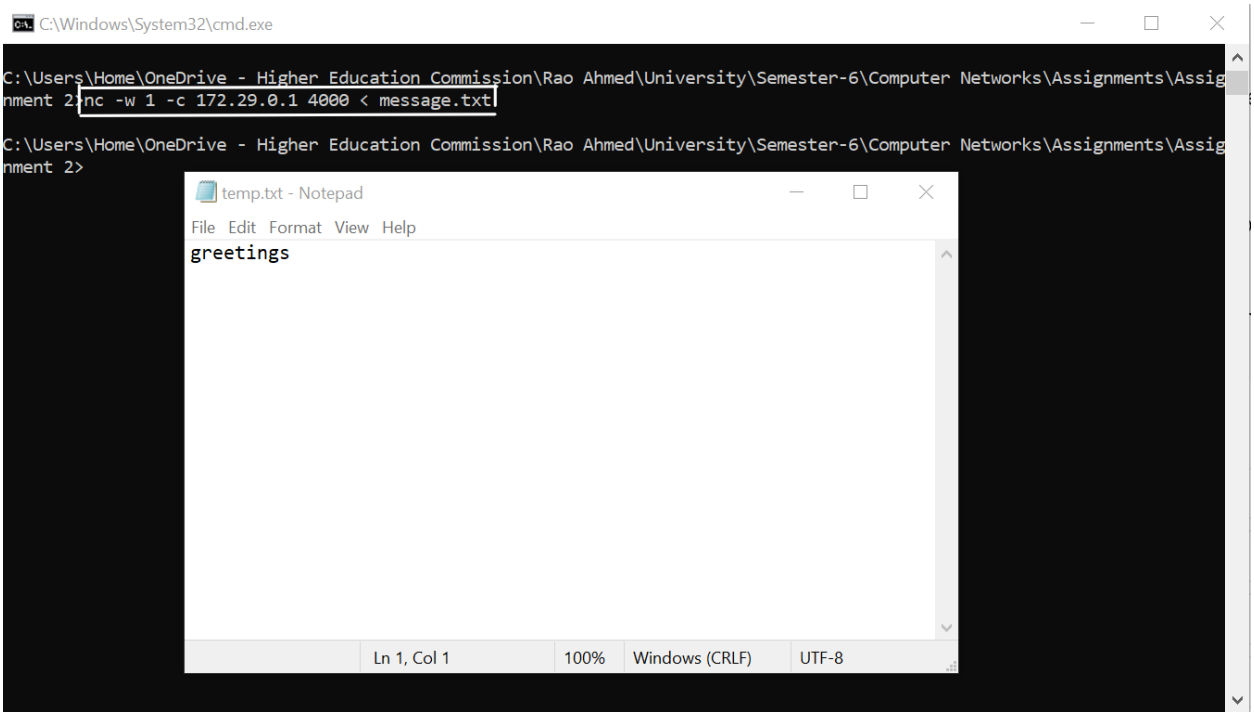
4000: The port number to connect to

< : redirects the content of the file

message.txt: The contents of the file to be sent over the connection.

Method 2: Mention the **-c flag** to send the **carriage return** and **line feed** instead of **line feed** only. In this case you do not need to enter a new line in the **message.txt** file.





Command: nc -w 1 -c 172.29.0.1 4000 < message.txt

Command break down:

nc: it is the netcat tool

-w 1: this flag set a 1 second timeout for the connection.

-c : this flag send CRLF (carriage return + line feed) instead of just LF (line feed)

172.29.0.1: The IP address to connect to

4000: The port number to connect to

< : redirects the content of the file

message.txt: The contents of the file to be sent over the connection.