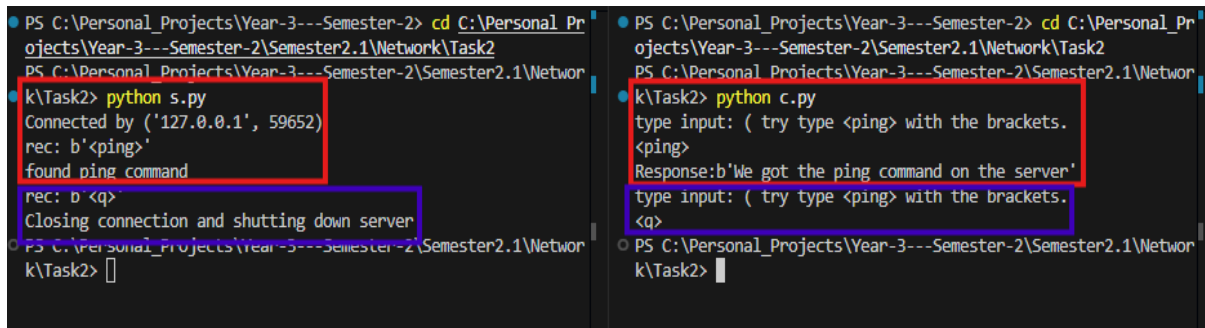


Task 3 Network Distributed Computing

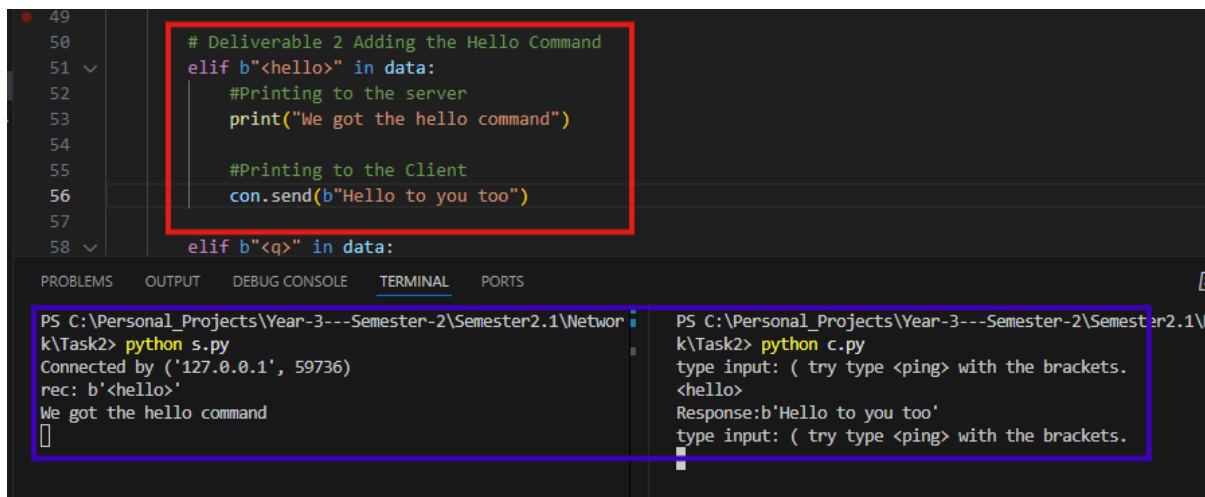
Deliverable 1



```
PS C:\Personal_Projects\Year-3---Semester-2> cd C:\Personal Projects\Year-3---Semester-2\Semester2.1\Network\Task2
PS C:\Personal_Projects\Year-3---Semester-2\Semester2.1\Network\Task2> python s.py
Connected by ('127.0.0.1', 59652)
rec: b'<ping>'
found ping command
rec: b'<q>'
Closing connection and shutting down server
PS C:\Personal_Projects\Year-3---Semester-2\Semester2.1\Network\Task2>

PS C:\Personal_Projects\Year-3---Semester-2> cd C:\Personal Projects\Year-3---Semester-2\Semester2.1\Network\Task2
PS C:\Personal_Projects\Year-3---Semester-2\Semester2.1\Network\Task2> python c.py
type input: ( try type <ping> with the brackets.
<ping>
Response:b'<We got the ping command on the server'
type input: ( try type <ping> with the brackets.
<q>
PS C:\Personal_Projects\Year-3---Semester-2\Semester2.1\Network\Task2>
```

Deliverable 2



```
# Deliverable 2 Adding the Hello Command
elif b"<hello>" in data:
    #Printing to the server
    print("We got the hello command")

    #Printing to the Client
    con.send(b"Hello to you too")

elif b"<q>" in data:
```

```
PS C:\Personal_Projects\Year-3---Semester-2\Semester2.1\Network\Task2> python s.py
Connected by ('127.0.0.1', 59736)
rec: b'<hello>'
We got the hello command

PS C:\Personal_Projects\Year-3---Semester-2\Semester2.1\Network\Task2> python c.py
type input: ( try type <ping> with the brackets.
<hello>
Response:b'Hello to you too'
type input: ( try type <ping> with the brackets.
```

Deliverable 3

Output of parts[0], parts[1], and parts[2].

Parts[0] = '<add

Parts[1] = 1

Part[2]= 2>'

Deliverable 4

```
Code:      var1 = parts[1]

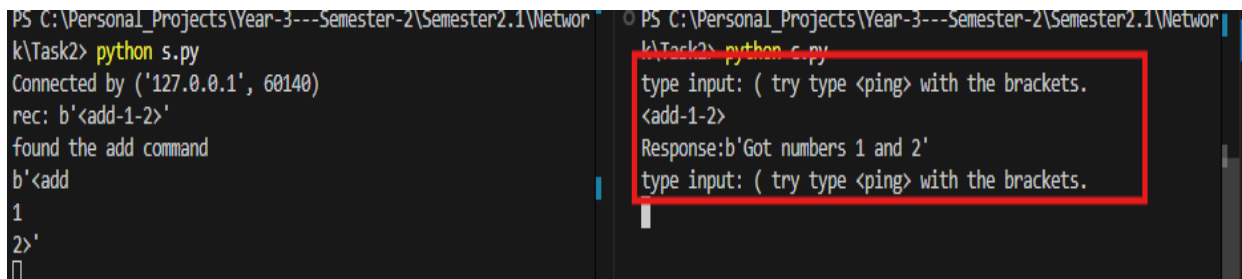
           var2 = str(parts[2])[0:-2]
```

Creates 2 variables 'var1' which holds the value of parts[1] (which prints out as 1) and 'var2' which holds the value of parts[2] (which prints out as 2>) but it also makes it into a string and uses '[0:-2]' to remove the last 2 characters so it would only output the number 2 instead of 2>.

Deliverable 5

```
Code: con.send(("Got numbers " + var1 + " and " + var2).encode())
```

Sends a message to the client using 'con.send' and the message being getting the 2 variables 'var1,var2' and then finally encoding the message from human readable text into low level bytes so that we can send over the socket to the client '.encode()'.



The image shows two terminal windows side-by-side. The left window shows a Python script 's.py' running as a server. It receives a connection from '127.0.0.1', receives the command '<add-1-2>', and responds with 'b'<add'. The right window shows a Python script 'c.py' running as a client. It sends the command '<add-1-2>' and receives the response 'Response:b'Got numbers 1 and 2'. A red box highlights the client's input and the server's response in the right window.

```
PS C:\Personal_Projects\Year-3---Semester-2\Semester2.1\Networ
k\Task2> python s.py
Connected by ('127.0.0.1', 60140)
rec: b'<add-1-2>'
found the add command
b'<add
1
2>'
[]
```

```
PS C:\Personal_Projects\Year-3---Semester-2\Semester2.1\Networ
k\Task2> python c.py
type input: ( try type <ping> with the brackets.
<add-1-2>
Response:b'Got numbers 1 and 2'
type input: ( try type <ping> with the brackets.
```