

- **Question 1:** How do you specify a TCP socket in Python?

1) First, you need to import socket library, and then you need to create a TCP socket like this: `s = socket.socket(socket.AF_INET, socket.SOCK_STREAM)`. And you will need to connect to the server and send data and recv the data from the server and finally close the connection.

- **Question 2:** What is the difference between a client socket and a server socket in Python?

2) A client socket will connect to a server socket, sends requests and receives responses/data from that sever. However, A server socket will listen for incoming connections, accepts them and uses them to communicate with the clients.

- **Question 3:** How do we instruct the OS to let us reuse the same bind port?

3) This comment will make the OS to reuse the same bind port:

```
s.setsockopt(socket.SOL_SOCKET, socket.SO_REUSEADDR, 1)
```

- **Question 4:** What information do we get about incoming connections?

4) We can use `accept` to get the incoming connections, like this: `conn, addr = s.accept()`, and we will get the connection and address which is like this : `('127.0.0.1', 33730)`

- **Question 5:** What is returned by `recv()` from the server after it is done sending the HTTP request?

5) The `recv()` will receive the data from the client, the data is a bytes object representing, and the returned bytes object contains the entire HTTP request, including the request method, the request URI, headers and body (if any).

- **Question 6:** Provide a link to your code on GitHub.

6) <https://github.com/PAULbigBA/CMPUT404-LAB>

