Computer System Administration 2 – Python Weekly Report 1

Date: Sunday 29th January 2017

What I did:

In this week I wrote an echo client to connect to an echo server on the local machine. The echo server is set up to listen on '**127.0.0.1**' and bind to port '**7**'and the client will try to connect to the server which is all done using the **socket** library, once the connection is established the user can send any arbitrary message and the server will reply with the same message which the client will print.

Specification Table

Inputs	Processing	Outputs
message	Input message Decode message Encode message Send encoded message to server	Receive reply from the server

Output

```
/usr/bin/python3.5 /home/msultan/PycharmProjects/Week_1/week_1.py
Starting client socket ...
Connected to 127.0.0.1 on port  7

Enter message: Hello World!
Received from server: Hello World!
Enter message: How are you?
Received from server: How are you?
Enter message: n
Data entry stopped.

Closing the socket connection ...
Done!

Process finished with exit code 0
```

(The program will be uploaded separately)

What I learned

I learned how to use sockets in python to create a client/server and the difference between stream sockets (**TCP**) and datagram sockets (**UDP**).

Problems I have encountered

My only problem this week was setting up the echo server, as I am running Fedora Linux on my machine instead of Ubuntu Linux, the instructions for setting up the echo server didn't apply to me but once I figured out how to set up the server on Fedora it was smooth sailing from there.