

For week 4 lab, in the first exercise, I ran into an issue where the prompt would print in the same thread as the enter message. To fix this I can use a lock, to synchronize the print statements and ensure that the input prompt appears correctly.

```
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS COMMENTS
PS C:\Users\Marzhan\OneDrive\Desktop\University\Computer Science year 2\Semester 2\Networks and OS\Week 4 lab> & C:/Users/Marzhan/AppData/Local/Python/Python39-64/Python.exe C:/Users/Marzhan/OneDrive/Desktop/University/Computer Science year 2/Semester 2/Networks and OS/Week 4 lab/Exercise_1.py
UDP Chat Server is running...
Enter message: hi there
Received from ('127.0.0.1', 61526): hi there
Enter message: how are you
Enter message: Received from ('127.0.0.1', 61526): how are you
im good
Received from ('127.0.0.1', 61526): im good
Enter message: s
Received from ('127.0.0.1', 61526): s
Enter message: s
```

I tweaked the code so that I can use a “print_lock” to ensure that the print statements from different threads do not interfere with each other.

```
PS C:\Users\Marzhan\OneDrive\Desktop\University\Computer Science year 2\Semester 2\Networks and OS\Week 4 lab> & C:/Users/Marzhan/AppData/Local/Python/Python39-64/Python.exe C:/Users/Marzhan/OneDrive/Desktop/University/Computer Science year 2/Semester 2/Networks and OS/Week 4 lab/Exercise_1.py
UDP Chat Server is running...
Enter message: hello
Received from ('127.0.0.1', 62921): hello
Enter message: how are you today
Received from ('127.0.0.1', 62921): how are you today
Enter message: I'm doing great thanks
Received from ('127.0.0.1', 62921): I'm doing great thanks
Enter message: 
```