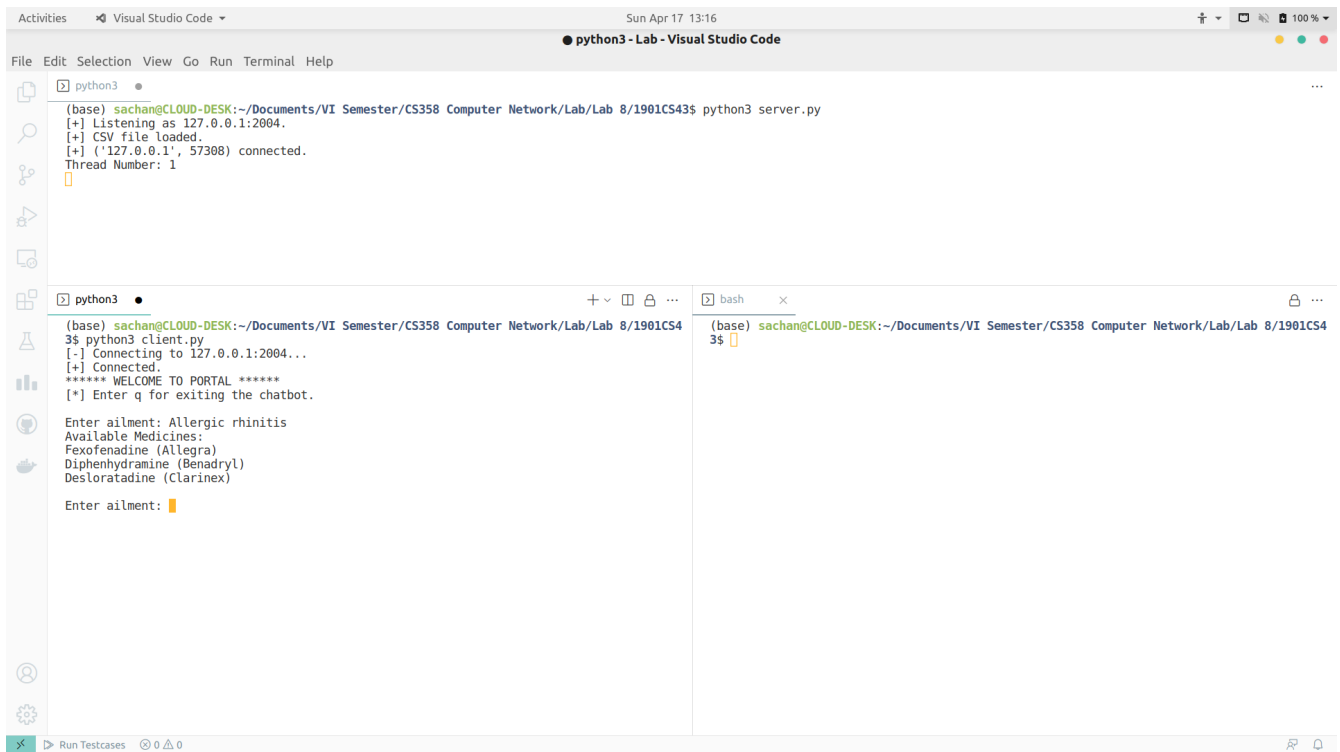**CS 359**
COMPUTER NETWORK LAB
ASSIGNMENT 8

BY - PRIYANKA SACHAN (1901CS43)

Multi Threaded Server

A multithreaded server that can open concurrent connections with more than one client.

Demo

Running server.py & client.py script for 1st client:

Running client.py script for 2nd client :


```
Activities          Visual Studio Code                          Sun Apr 17 13:17                                          100 %

                                              ● python3 - Lab - Visual Studio Code

File  Edit  Selection  View  Go  Run  Terminal  Help

   python3 ●                                                                                                            ...

      (base) sachan@CLOUD-DESK:~/Documents/VI Semester/CS358 Computer Network/Lab/Lab 8/1901CS43$ python3 server.py
      [+] Listening as 127.0.0.1:2004.
      [+] CSV file loaded.
      [+] ('127.0.0.1', 57308) connected.
      Thread Number: 1
      [+] ('127.0.0.1', 57310) connected.
      Thread Number: 2


   python3 ●                                              🔒  ...      python3 ●                                  + ⌄ ▯ 🔒 ...

      (base) sachan@CLOUD-DESK:~/Documents/VI Semester/CS358 Computer Network/Lab/Lab 8/1901CS4    (base) sachan@CLOUD-DESK:~/Documents/VI Semester/CS358 Computer Network/Lab/Lab 8/1901CS4
      3$ python3 client.py                                        3$ python3 client.py
      [-] Connecting to 127.0.0.1:2004...                         [-] Connecting to 127.0.0.1:2004...
      [+] Connected.                                              [+] Connected.
      ****** WELCOME TO PORTAL ******                             ****** WELCOME TO PORTAL ******
      [*] Enter q for exiting the chatbot.                        [*] Enter q for exiting the chatbot.

      Enter ailment: Allergic rhinitis                            Enter ailment: Sprain
      Available Medicines:                                        Available Medicines:
      Fexofenadine (Allegra)                                      Ibuprofen (Advil/Motrin)
      Diphenhydramine (Benadryl)                                  Acetaminophen (Tylenol)
      Desloratadine (Clarinex)                                    Aspirin

      Enter ailment: ▯                                            Enter ailment: Cystitis
                                                                  Available Medicines:
                                                                  Nitrofurantoin

                                                                  Enter ailment: ▮
```
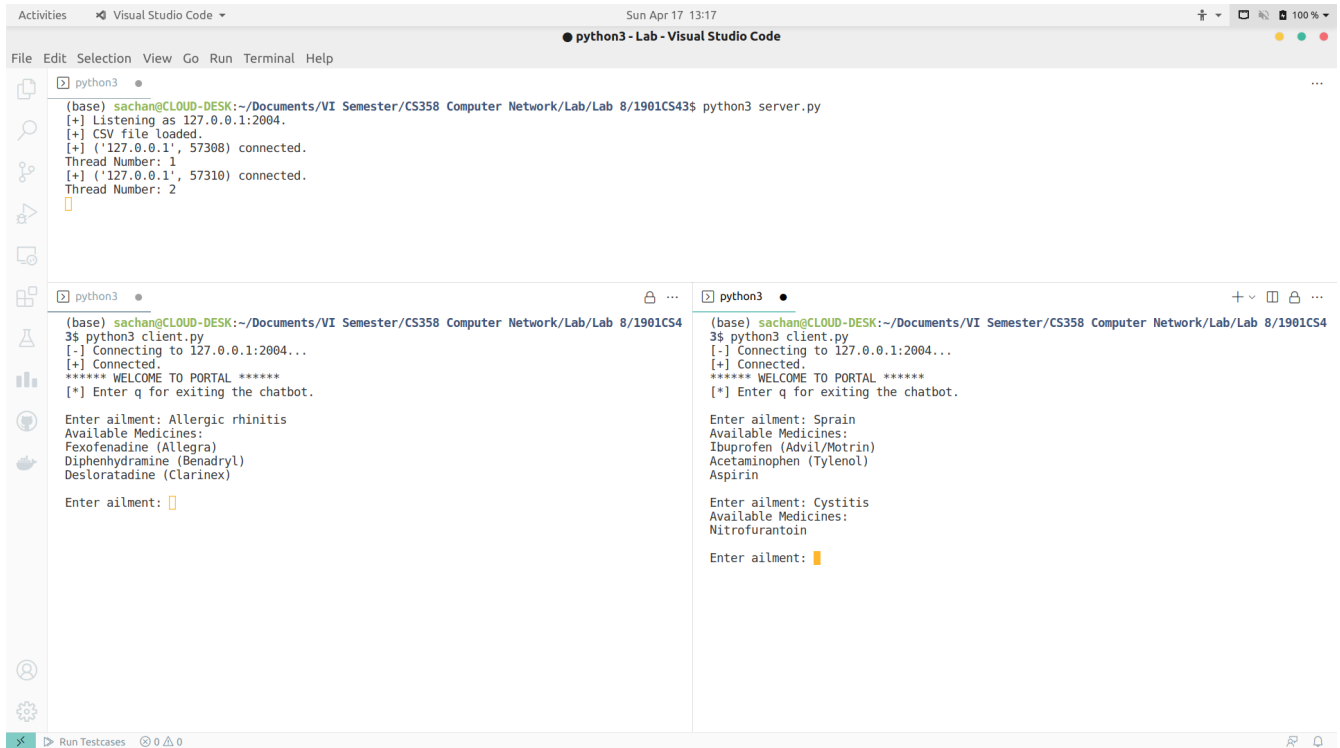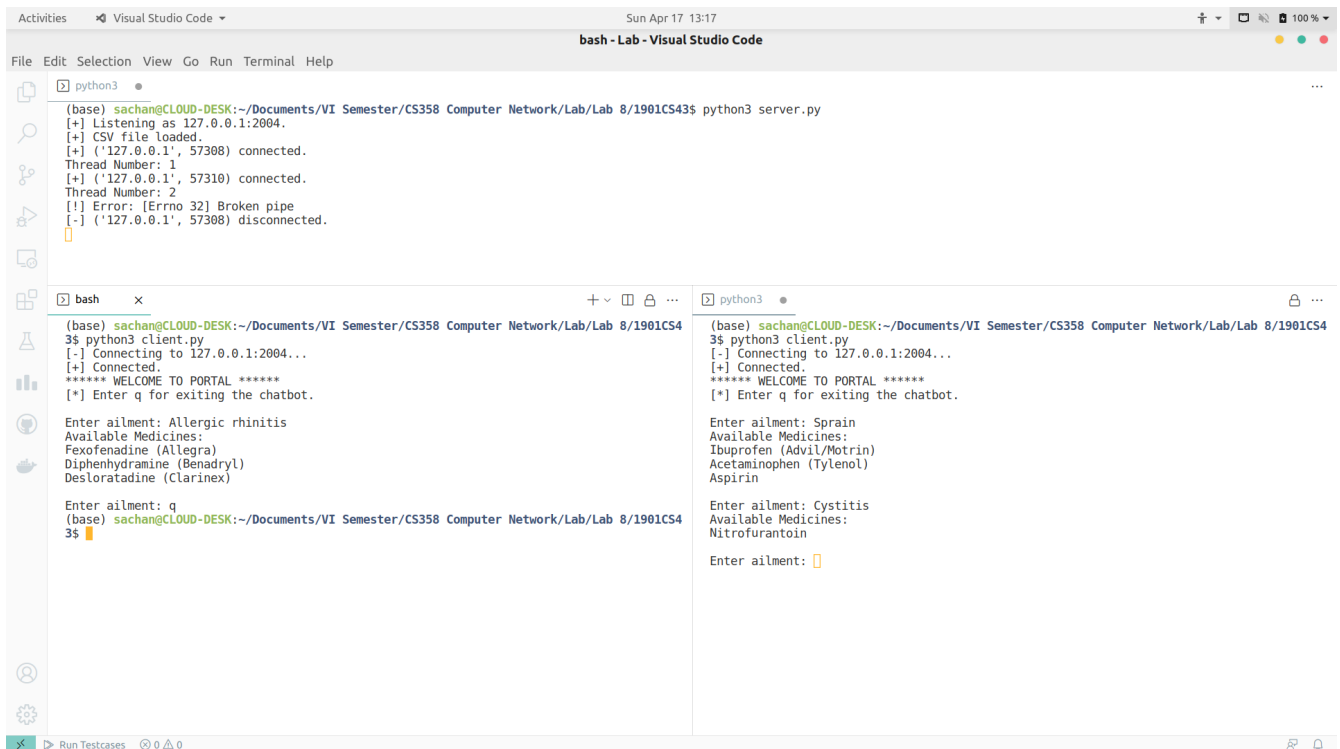
Disconnecting 1st client:

```
Activities          Visual Studio Code                          Sun Apr 17 13:17                                          100 %

                                              bash - Lab - Visual Studio Code

File  Edit  Selection  View  Go  Run  Terminal  Help

   python3 ●                                                                                                            ...

      (base) sachan@CLOUD-DESK:~/Documents/VI Semester/CS358 Computer Network/Lab/Lab 8/1901CS43$ python3 server.py
      [+] Listening as 127.0.0.1:2004.
      [+] CSV file loaded.
      [+] ('127.0.0.1', 57308) connected.
      Thread Number: 1
      [+] ('127.0.0.1', 57310) connected.
      Thread Number: 2
      [!] Error: [Errno 32] Broken pipe
      [-] ('127.0.0.1', 57308) disconnected.


   bash  ✕                                              + ⌄ ▯ 🔒 ...      python3 ●                                  🔒 ...

      (base) sachan@CLOUD-DESK:~/Documents/VI Semester/CS358 Computer Network/Lab/Lab 8/1901CS4    (base) sachan@CLOUD-DESK:~/Documents/VI Semester/CS358 Computer Network/Lab/Lab 8/1901CS4
      3$ python3 client.py                                        3$ python3 client.py
      [-] Connecting to 127.0.0.1:2004...                         [-] Connecting to 127.0.0.1:2004...
      [+] Connected.                                              [+] Connected.
      ****** WELCOME TO PORTAL ******                             ****** WELCOME TO PORTAL ******
      [*] Enter q for exiting the chatbot.                        [*] Enter q for exiting the chatbot.

      Enter ailment: Allergic rhinitis                            Enter ailment: Sprain
      Available Medicines:                                        Available Medicines:
      Fexofenadine (Allegra)                                      Ibuprofen (Advil/Motrin)
      Diphenhydramine (Benadryl)                                  Acetaminophen (Tylenol)
      Desloratadine (Clarinex)                                    Aspirin

      Enter ailment: q                                            Enter ailment: Cystitis
      (base) sachan@CLOUD-DESK:~/Documents/VI Semester/CS358 Computer Network/Lab/Lab 8/1901CS4    Available Medicines:
      3$ ▮                                                        Nitrofurantoin

                                                                  Enter ailment: ▯
```
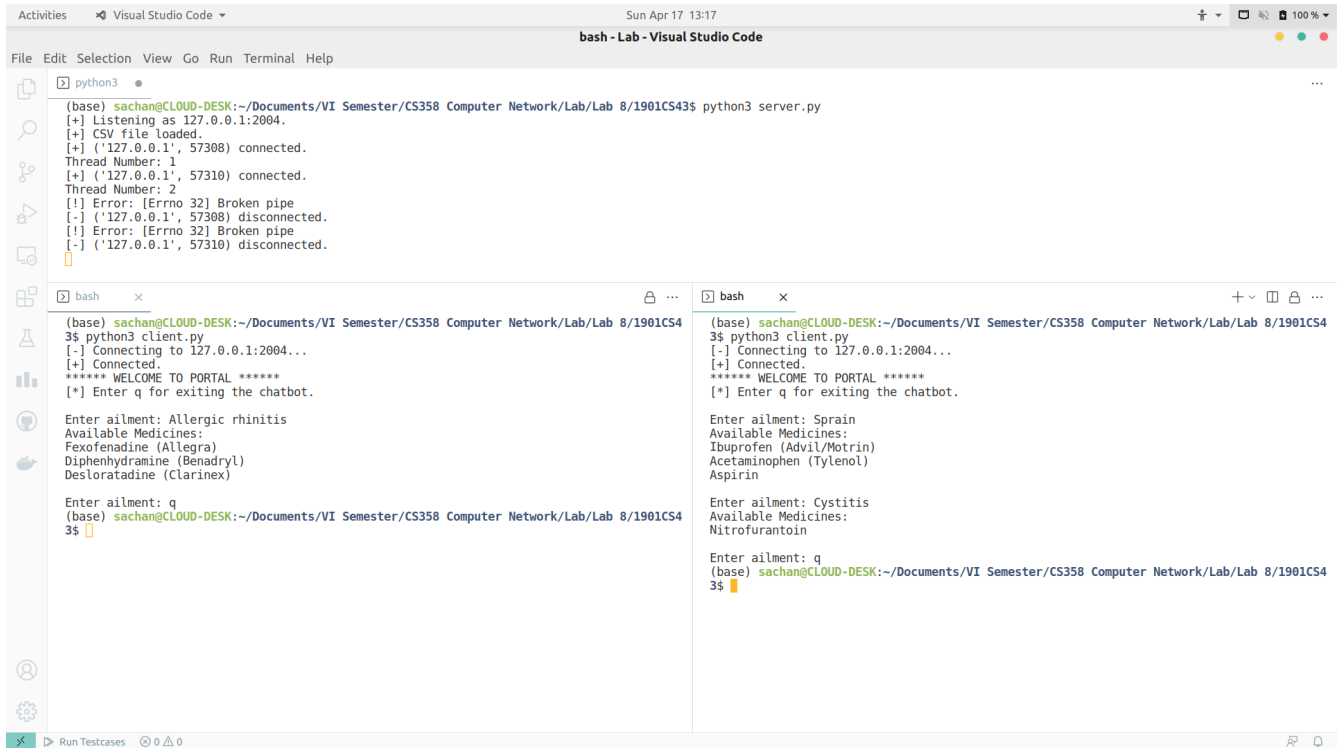
Disconnecting 2nd client: