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Entry No : 2020CSB1317

### Task-1 :

#### Step 1 :

Run the server.out file

Commands:

To compile: `gcc server.c -o server.out`

To run: `./server.out`

A screenshot of a terminal window with a dark background. The terminal shows the command `subham@subham:/mnt/c/Users/subha/Desktop/Acads/CS304/Assignment-3/Task-1$ ./server.out` and its output: `[LISTENING] Server is listening on port 5555`. The terminal has tabs for PROBLEMS, OUTPUT, DEBUG CONSOLE, TERMINAL, and COMMENTS. The TERMINAL tab is active. There are icons for window management in the top right corner.

```
PROBLEMS 34 OUTPUT DEBUG CONSOLE TERMINAL COMMENTS wsl + - □ ...  
subham@subham:/mnt/c/Users/subha/Desktop/Acads/CS304/Assignment-3/Task-1$ ./server.out  
[LISTENING] Server is listening on port 5555
```

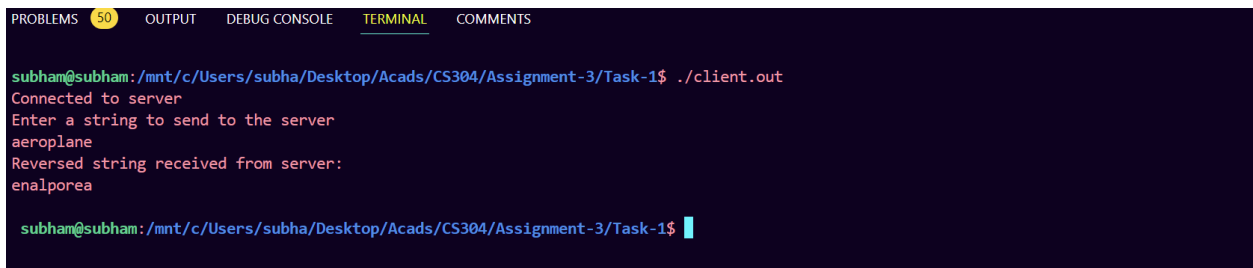
#### Step 2:

Run any of the client files (client-1.c , client-2.c , client-3.c , client-4.c , client-5.c )

To compile : `gcc client-1.c -o client.out`

To run: `./client.out`

Input the string you want to send to the server.

A screenshot of a terminal window with a dark background. The terminal shows the command `subham@subham:/mnt/c/Users/subha/Desktop/Acads/CS304/Assignment-3/Task-1$ ./client.out` and its output: `Connected to server`, `Enter a string to send to the server`, `aeroplane`, `Reversed string received from server:`, and `enalporea`. The terminal has tabs for PROBLEMS, OUTPUT, DEBUG CONSOLE, TERMINAL, and COMMENTS. The TERMINAL tab is active. There are icons for window management in the top right corner.

```
PROBLEMS 50 OUTPUT DEBUG CONSOLE TERMINAL COMMENTS  
subham@subham:/mnt/c/Users/subha/Desktop/Acads/CS304/Assignment-3/Task-1$ ./client.out  
Connected to server  
Enter a string to send to the server  
aeroplane  
Reversed string received from server:  
enalporea  
subham@subham:/mnt/c/Users/subha/Desktop/Acads/CS304/Assignment-3/Task-1$
```

## Task-2:

### Step 1 :

Run the server.out file

Commands:

To compile: gcc server.c -o server.out

To run: ./server.out

Enter the credentials :

User\_id : admin

Password : password

```
subham@subham:/mnt/c/Users/subha/Desktop/Acads/CS304/Assignment-3/Task-2$ gcc server.c -o server.out
subham@subham:/mnt/c/Users/subha/Desktop/Acads/CS304/Assignment-3/Task-2$ ./server.out
Enter user_id : admin
Enter password : password
Authentication Successful !
[LISTENING] Server is listening on port 5556
```

### Step 2:

Run any of the client files (client-1.c , client-2.c , client-3.c , client-4.c , client-5.c )

To compile : gcc client-1.c -o client.out

To run: ./client.out

Enter the number of tickets booked

```
subham@subham:/mnt/c/Users/subha/Desktop/Acads/CS304/Subham_2020csb1317_A3/Task-2$ gcc client-1.c -o client.out
subham@subham:/mnt/c/Users/subha/Desktop/Acads/CS304/Subham_2020csb1317_A3/Task-2$ ./client.out
Connected to server
=====
Enter number of tickets to be booked

Enter QUIT to quit
=====
Input : 34
```

Attached is the screenshot of the process.

The initial number of tickets 1000 is stored in the server\_records.txt file itself.

**[INFO] Tickets Available : 1000**

The initial number of tickets can be changed here in place of 1000.

```
server_records.txt X
Task-2 > server_records.txt
1 [INFO] Tickets Available : 1000
2
3
4 Client 1 booked : 34
5
6 [INFO] Tickets Available : 966
7

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
subham@subham: /mnt/c/Users/subha/Desktop/Acads/CS304/Subham_2020csb1317_A3/Task-2$ ./client.out
Connected to server
=====
Enter number of tickets to be booked

Enter QUIT to quit
=====
Input : 34
Client message: client-1:34
Data sent to the server
Data received from the server: 34
Tickets Booked : 34
Tickets Now Available : 966

Connected to server
=====
Enter number of tickets to be booked

Enter QUIT to quit
=====
Input : 
```

After booking through 5 clients, servers\_records.txt would look like this:

```
server_records.txt X
Task-2 > server_records.txt
1 [INFO] Tickets Available : 1000
2
3
4
5 Client 1 booked : 56
6
7 [INFO] Tickets Available : 944
8
9 Client 3 booked : 344
10
11 [INFO] Tickets Available : 600
12
13 Client 4 booked : 89
14
15 [INFO] Tickets Available : 511
16
17 Client 5 booked : 345
18
19 [INFO] Tickets Available : 166
20
21 Client 4 booked : 89
22
23 [INFO] Tickets Available : 77
24
```