

# CS359 - Computer Network Lab

## Lab 5

Tarusi Mittal

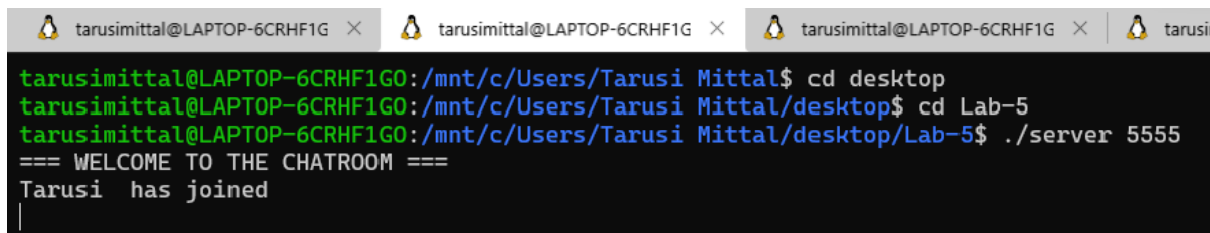
1901CS65

The folder contains two files:

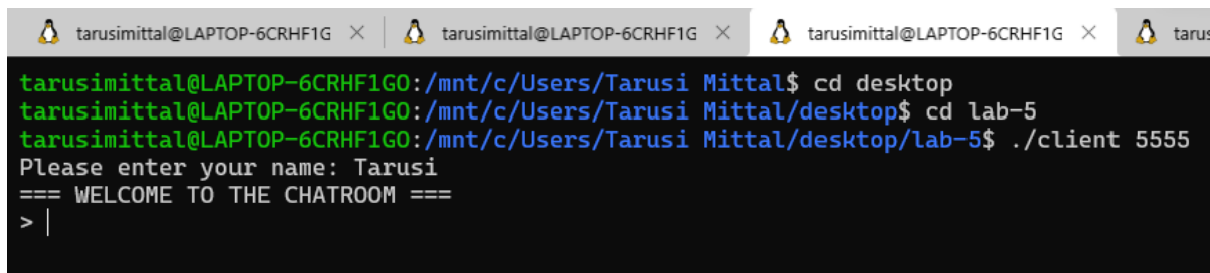
1 server.c

2 client.c

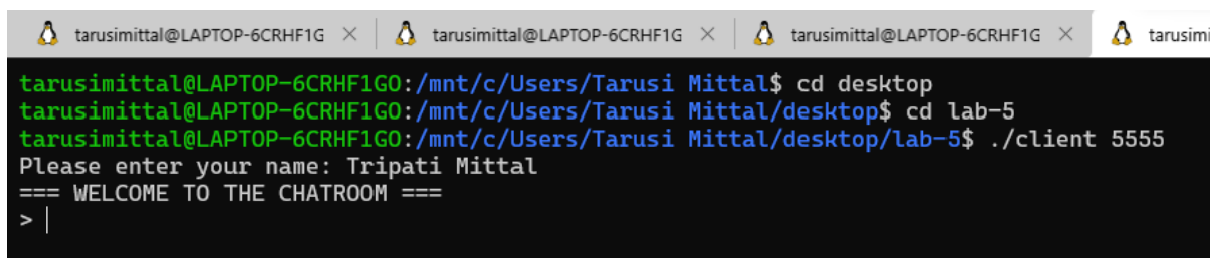
1 Initially when we run the server and make one person join the server looks like this:

A terminal window with a dark background and light-colored text. The prompt is 'tarusimittal@LAPTOP-6CRHF1G'. The user navigates through the directory structure: /mnt/c/Users/Tarusi Mittal, then to the desktop, then to the Lab-5 directory. Finally, they run './server 5555'. The output shows '=== WELCOME TO THE CHATROOM ===' and 'Tarusi has joined'.

And the client side looks like this

A terminal window with a dark background and light-colored text. The prompt is 'tarusimittal@LAPTOP-6CRHF1G'. The user navigates through the directory structure: /mnt/c/Users/Tarusi Mittal, then to the desktop, then to the lab-5 directory. They run './client 5555'. The output shows 'Please enter your name: Tarusi', '=== WELCOME TO THE CHATROOM ===', and a prompt '> |'.

2. Then we join one another client

A terminal window with a dark background and light-colored text. The prompt is 'tarusimittal@LAPTOP-6CRHF1G'. The user navigates through the directory structure: /mnt/c/Users/Tarusi Mittal, then to the desktop, then to the lab-5 directory. They run './client 5555'. The output shows 'Please enter your name: Tripati Mittal', '=== WELCOME TO THE CHATROOM ===', and a prompt '> |'.

3. These are what our server and other client interfaces look then

```
tarusimittal@LAPTOP-6CRHF1G X | tarusimittal@LAPTOP-6CRHF1G X | tarusimittal@LAPTOP-6CRHF1G X | tarusimittal@LAPTOP-6CRHF1G X |
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal$ cd desktop
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal/desktop$ cd lab-5
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal/desktop/lab-5$ ./client 5555
Please enter your name: Tarusi
=== WELCOME TO THE CHATROOM ===
> Tripati Mittal has joined
> |
```

```
tarusimittal@LAPTOP-6CRHF1G X | tarusimittal@LAPTOP-6CRHF1G X | tarusimittal@LAPTOP-6CRHF1G X | tarusimittal@LAPTOP-6CRHF1G X |
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal$ cd desktop
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal/desktop$ cd Lab-5
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal/desktop/Lab-5$ ./server 5555
=== WELCOME TO THE CHATROOM ===
Tarusi has joined
Tripati Mittal has joined
|
```

4. Then we make entry of our third client

```
tarusimittal@LAPTOP-6CRHF1G X | tarusimittal@LAPTOP-6CRHF1G X | tarusimittal@LAPTOP-6CRHF1G X | tarusimittal@LAPTOP-6CRHF1G X |
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal$ cd desktop
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal/desktop$ cd lab-5
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal/desktop/lab-5$ ./client 5555
Please enter your name: Tejas Kapoor
=== WELCOME TO THE CHATROOM ===
> |
```

5. These are what our other client interfaces look then

```
tarusimittal@LAPTOP-6CRHF1G X | tarusimittal@LAPTOP-6CRHF1G X | tarusimittal@LAPTOP-6CRHF1G X | tarusimittal@LAPTOP-6CRHF1G X |
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal$ cd desktop
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal/desktop$ cd lab-5
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal/desktop/lab-5$ ./client 5555
Please enter your name: Tripati Mittal
=== WELCOME TO THE CHATROOM ===
> Tejas Kapoor has joined
> |
```

```
tarusimittal@LAPTOP-6CRHF1G X | tarusimittal@LAPTOP-6CRHF1G X | tarusimittal@LAPTOP-6CRHF1G X | tarusimittal@LAPTOP-6CRHF1G X |
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal$ cd desktop
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal/desktop$ cd lab-5
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal/desktop/lab-5$ ./client 5555
Please enter your name: Tarusi
=== WELCOME TO THE CHATROOM ===
> Tripati Mittal has joined
> Tejas Kapoor has joined
> |
```

```
tarusimittal@LAPTOP-6CRHF1G X tarusimittal@LAPTOP-6CRHF1G X tarusimittal@LAPTOP-6CRHF1G X taru
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal$ cd desktop
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal/desktop$ cd Lab-5
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal/desktop/Lab-5$ ./server 5555
=== WELCOME TO THE CHATROOM ===
Tarusi has joined
Tripathi Mittal has joined
Tejas Kapoor has joined
|
```

6. Now as two clients text these are hat client screens look now

```
tarusimittal@LAPTOP-6CRHF1G X tarusimittal@LAPTOP-6CRHF1G X tarusimittal@LAPTOP-6CRHF1G X taru
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal$ cd desktop
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal/desktop$ cd Lab-5
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal/desktop/Lab-5$ ./server 5555
=== WELCOME TO THE CHATROOM ===
Tarusi has joined
Tripathi Mittal has joined
Tejas Kapoor has joined
Tarusi : Hey Tejas
Tejas Kapoor: Heyy
|
```

```
tarusimittal@LAPTOP-6CRHF1G X tarusimittal@LAPTOP-6CRHF1G X tarusimittal@LAPTOP-6CRHF1G X taru
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal$ cd desktop
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal/desktop$ cd lab-5
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal/desktop/lab-5$ ./client 5555
Please enter your name: Tarusi
=== WELCOME TO THE CHATROOM ===
> Tripathi Mittal has joined
> Tejas Kapoor has joined
> Hey Tejas
> Tejas Kapoor: Heyy
> |
```

```
tarusimittal@LAPTOP-6CRHF1G X tarusimittal@LAPTOP-6CRHF1G X tarusimittal@LAPTOP-6CRHF1G X taru
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal$ cd desktop
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal/desktop$ cd lab-5
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal/desktop/lab-5$ ./client 5555
Please enter your name: Tripathi Mittal
=== WELCOME TO THE CHATROOM ===
> Tejas Kapoor has joined
> Tarusi : Hey Tejas
> Tejas Kapoor: Heyy
> |
```

```
tarusimittal@LAPTOP-6CRHF1G X | tarusimittal@LAPTOP-6CRHF1G X | tarusimittal@LAPTOP-6CRHF1G X | tarusimittal@LAPTOP-6CRHF1G X |
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal$ cd desktop
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal/desktop$ cd lab-5
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal/desktop/lab-5$ ./client 5555
Please enter your name: Tejas Kapoor
=== WELCOME TO THE CHATROOM ===
> Tarusi : Hey Tejas
> Heyy
> |
```

7. here are the screenshots of when our conversation is a little more

```
tarusimittal@LAPTOP-6CRHF1G X | tarusimittal@LAPTOP-6CRHF1G X | tarusimittal@LAPTOP-6CRHF1G X | tarusimittal@LAPTOP-6CRHF1G X |
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal$ cd desktop
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal/desktop$ cd Lab-5
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal/desktop/Lab-5$ ./server 5555
=== WELCOME TO THE CHATROOM ===
Tarusi has joined
Tripathi Mittal has joined
Tejas Kapoor has joined
Tarusi : Hey Tejas
Tejas Kapoor: Heyy
Tripathi Mittal: Hi guys, i am here too
Tarusi : Lol okayy
> |
```

```
tarusimittal@LAPTOP-6CRHF1G X | tarusimittal@LAPTOP-6CRHF1G X | tarusimittal@LAPTOP-6CRHF1G X | tarusimittal@LAPTOP-6CRHF1G X |
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal$ cd desktop
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal/desktop$ cd lab-5
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal/desktop/lab-5$ ./client 5555
Please enter your name: Tarusi
=== WELCOME TO THE CHATROOM ===
> Tripathi Mittal has joined
> Tejas Kapoor has joined
> Hey Tejas
> Tejas Kapoor: Heyy
> Tripathi Mittal: Hi guys, i am here too
> Lol okayy
> |
```

```
tarusimittal@LAPTOP-6CRHF1G X | tarusimittal@LAPTOP-6CRHF1G X | tarusimittal@LAPTOP-6CRHF1G X | tarusimittal@LAPTOP-6CRHF1G X |
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal$ cd desktop
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal/desktop$ cd lab-5
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal/desktop/lab-5$ ./client 5555
Please enter your name: Tejas Kapoor
=== WELCOME TO THE CHATROOM ===
> Tarusi : Hey Tejas
> Heyy
> Tripathi Mittal: Hi guys, i am here too
> Tarusi : Lol okayy
> |
```

8. Now a new client has joined the chatbox

The client himself:

```
tarusimittal@LAPTOP-6CRHF1G X | tarusimittal@LAPTOP-6CRHF1G X | tarusimittal@LAPTOP-6CRHF1G X | tarusimittal@LAPTOP-6CRHF1G X |
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal$ cd desktop
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal/desktop$ cd Lab-5
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal/desktop/Lab-5$ ./client 5555
Please enter your name: Rachita
=== WELCOME TO THE CHATROOM ===
> |
```

Other users:

```
tarusimittal@LAPTOP-6CRHF1G X | tarusimittal@LAPTOP-6CRHF1G X | tarusimittal@LAPTOP-6CRHF1G X | tarusimittal@LAPTOP-6CRHF1G X |
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal$ cd desktop
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal/desktop$ cd lab-5
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal/desktop/lab-5$ ./client 5555
Please enter your name: Tarusi
=== WELCOME TO THE CHATROOM ===
> Tripathi Mittal has joined
> Tejas Kapoor has joined
> Hey Tejas
> Tejas Kapoor: Heyy
> Tripathi Mittal: Hi guys, i am here too
> Lol okayy
> Rachita has joined
> |
```

Server:

```
tarusimittal@LAPTOP-6CRHF1G X | tarusimittal@LAPTOP-6CRHF1G X | tarusimittal@LAPTOP-6CRHF1G X | tarusimittal@LAPTOP-6CRHF1G X |
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal$ cd desktop
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal/desktop$ cd Lab-5
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal/desktop/Lab-5$ ./server 5555
=== WELCOME TO THE CHATROOM ===
Tarusi has joined
Tripathi Mittal has joined
Tejas Kapoor has joined
Tarusi : Hey Tejas
Tejas Kapoor: Heyy
Tripathi Mittal: Hi guys, i am here too
Tarusi : Lol okayy
Rachita has joined
|
```

9. Now our new user texts and this are our interfaces

The user himself:

```
tarusimittal@LAPTOP-6CRHF1G X tarusimittal@LAPTOP-6CRHF1G X tarusimittal@LAPTOP-6CRHF1G X tarusimitta
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal$ cd desktop
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal/desktop$ cd Lab-5
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal/desktop/Lab-5$ ./client 5555
Please enter your name: Rachita
=== WELCOME TO THE CHATROOM ===
> Hi everyone
> |
```

Other users:

```
tarusimittal@LAPTOP-6CRHF1G X tarusimittal@LAPTOP-6CRHF1G X tarusimittal@LAPTOP-6CRHF1G X tarusimittal@LAPTOP-6CRHF1G X t
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal$ cd desktop
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal/desktop$ cd Lab-5
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal/desktop/Lab-5$ ./client 5555
Please enter your name: Tejas kapoor
=== WELCOME TO THE CHATROOM ===
> Tarusi: Hey Tejas
> Heyy
> Tripati Mittal: Hi guys, i am here too
> Tarusi: Lol okayy
> Rachita has joined
> Rachita: Hi everyone
> |
```

Server:

```
tarusimittal@LAPTOP-6CRHF1G X tarusimittal@LAPTOP-6CRHF1G X tarusimittal@LAPTOP-6CRHF1G X taru
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal$ cd desktop
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal/desktop$ cd Lab-5
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal/desktop/Lab-5$ ./server 5555
=== WELCOME TO THE CHATROOM ===
Tarusi has joined
Tripati Mittal has joined
Tejas kapoor has joined
Tarusi: Hey Tejas
Tejas kapoor: Heyy
Tripati Mittal: Hi guys, i am here too
Tarusi: Lol okayy
Rachita has joined
Rachita: Hi everyone
|
```

10. Now one of our user decides to leave the chatbox

Screen of user himself:

```
tarusimittal@LAPTOP-6CRHF1G X | tarusimittal@LAPTOP-6CRHF1G X | tarusimittal@LAPTOP-6CRHF1G X | tarusimittal@LAPTOP-6CRHF1G X
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal$ cd desktop
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal/desktop$ cd Lab-5
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal/desktop/Lab-5$ ./client 5555
Please enter your name: Tejas Kapoor
=== WELCOME TO THE CHATROOM ===
> Tarusi: Hey Tejas
> Heyy
> Tripati Mittal: Hi guys, i am here too
> Tarusi: Lol okayy
> Rachita has joined
> Rachita: Hi everyone
> ^C
Bye
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal/desktop/Lab-5$ |
```

Server:

```
tarusimittal@LAPTOP-6CRHF1G X | tarusimittal@LAPTOP-6CRHF1G X | tarusimittal@LAPTOP-6CRHF1G X | tarusimittal@LAPTOP-6CRHF1G X
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal$ cd desktop
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal/desktop$ cd Lab-5
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal/desktop/Lab-5$ ./server 5555
=== WELCOME TO THE CHATROOM ===
Tarusi has joined
Tripati Mittal has joined
Tejas Kapoor has joined
Tarusi: Hey Tejas
Tejas Kapoor: Heyy
Tripati Mittal: Hi guys, i am here too
Tarusi: Lol okayy
Rachita has joined
Rachita: Hi everyone
Tejas Kapoor has left
|
```

Other clients:

```
tarusimittal@LAPTOP-6CRHF1G0:/mnt/c/Users/Tarusi Mittal/desktop/Lab-5$ ./client 5555
Please enter your name: Tripati Mittal
=== WELCOME TO THE CHATROOM ===
> Tejas Kapoor has joined
> Tarusi: Hey Tejas
> Tejas Kapoor: HEyy
> Hi guys, i am here too
> Tarusi: Lol okayy
> Rachita has joined
> Rachita: Hi everyone
> Tejas Kapoor has left
> |
```

---

END

---