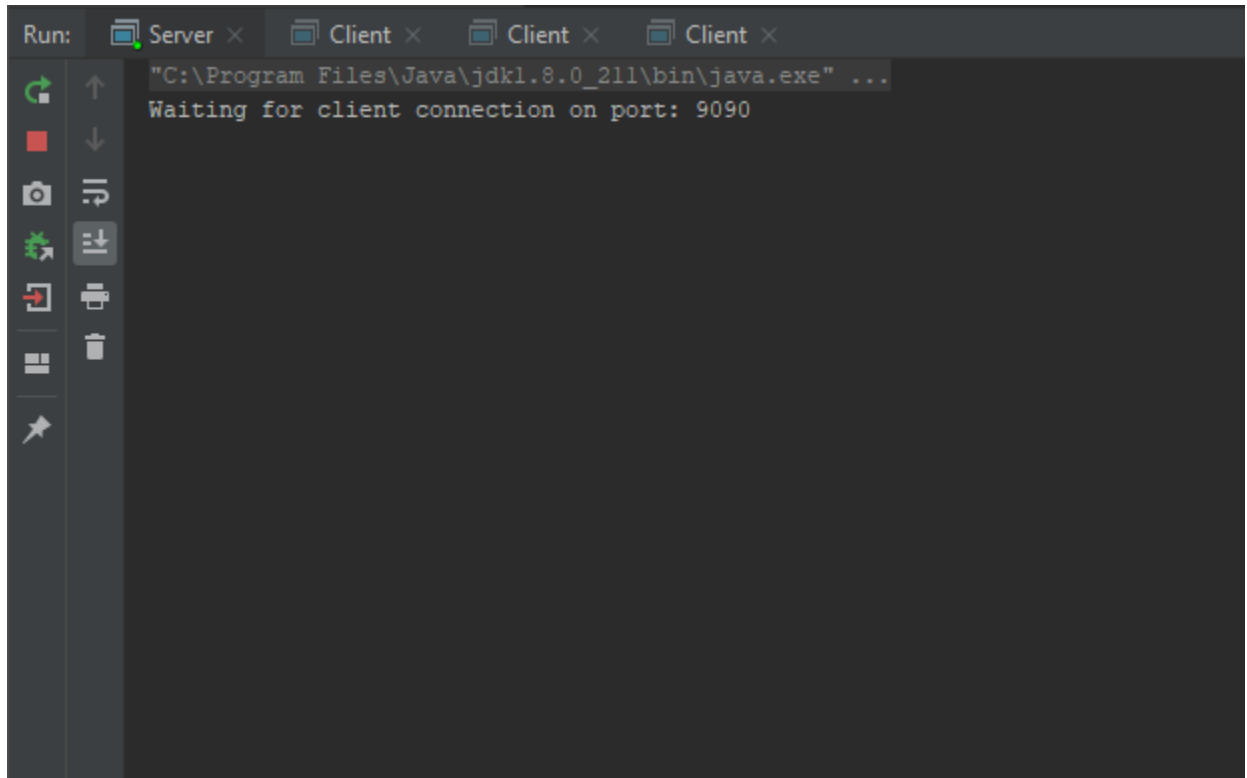


Name: Feza Roheel

Section: AP-8B

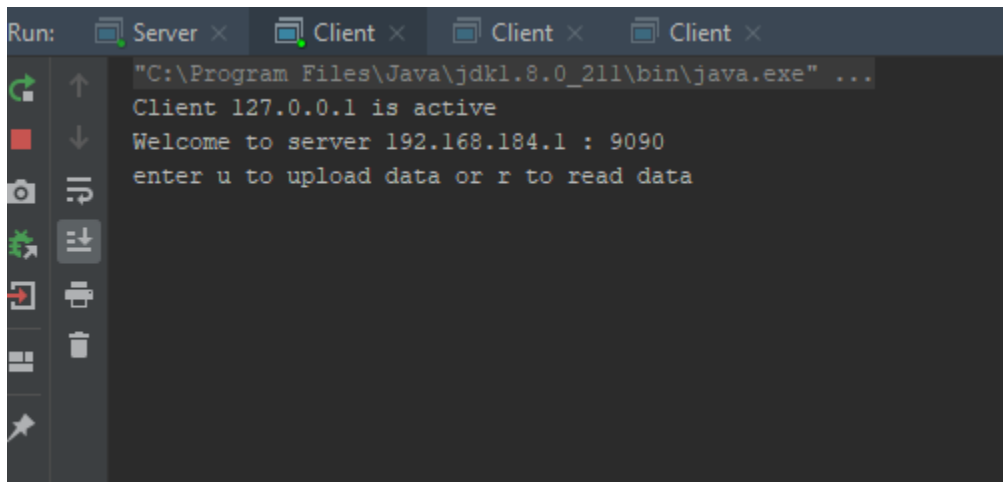
Homework # 3

1) Start Server

A screenshot of an IDE's Run console. The top bar shows four tabs: 'Server', 'Client', 'Client', and 'Client'. The 'Server' tab is active. The console output shows the command to run the Java application and the message 'Waiting for client connection on port: 9090'.

```
Run: "C:\Program Files\Java\jdk1.8.0_211\bin\java.exe" ...  
Waiting for client connection on port: 9090
```

2) Connect Client 1

A screenshot of the same IDE's Run console. The top bar shows the same four tabs. The 'Server' tab is still active. The console output now shows that a client has connected, displaying the IP address, a welcome message, and instructions for using the server.

```
Run: "C:\Program Files\Java\jdk1.8.0_211\bin\java.exe" ...  
Client 127.0.0.1 is active  
Welcome to server 192.168.184.1 : 9090  
enter u to upload data or r to read data
```

```
Server x Client x Client x Client x
"C:\Program Files\Java\jdk1.8.0_211\bin\java.exe" ...
Waiting for client connection on port: 9090
Got connection from 127.0.0.1 : 52081
Active Connections = 1
Welcome to server 192.168.184.1 : 9090
|
```

3) Connecting Client 2

```
Run: Server x Client x Client x Client x
"C:\Program Files\Java\jdk1.8.0_211\bin\java.exe" ...
Client 127.0.0.1 is active
Welcome to server 192.168.184.1 : 9090
enter u to upload data or r to read data
```

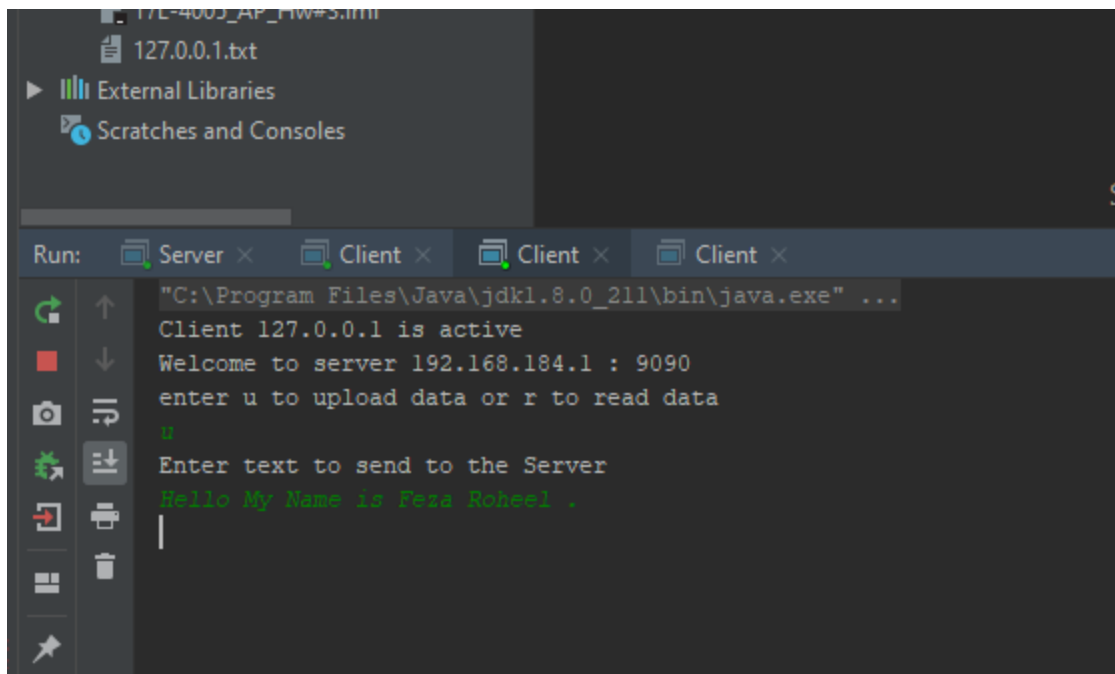
```
n: Server x Client x Client x Client x
"C:\Program Files\Java\jdk1.8.0_211\bin\java.exe" ...
Waiting for client connection on port: 9090
Got connection from 127.0.0.1 : 52081
Active Connections = 1
Welcome to server 192.168.184.1 : 9090
Got connection from 127.0.0.1 : 52093
Active Connections = 2
Welcome to server 192.168.184.1 : 9090
|
```

4) Read Data from client 1

```
Run: Server x Client x Client x Client x
"C:\Program Files\Java\jdk1.8.0_211\bin\java.exe" ...
Client 127.0.0.1 is active
Welcome to server 192.168.184.1 : 9090
enter u to upload data or r to read data
*
Reading data from the Server
[Data from Server]: No Information found
```

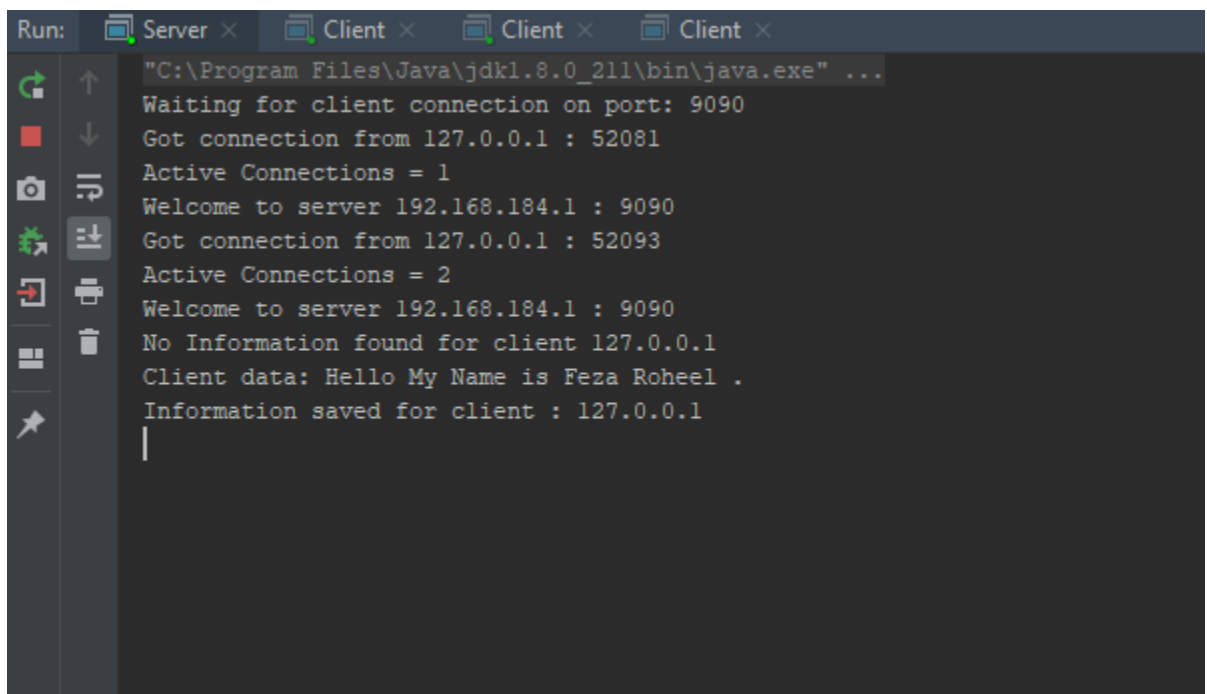
```
Server x Client x Client x Client x
"C:\Program Files\Java\jdk1.8.0_211\bin\java.exe" ...
Waiting for client connection on port: 9090
Got connection from 127.0.0.1 : 52081
Active Connections = 1
Welcome to server 192.168.184.1 : 9090
Got connection from 127.0.0.1 : 52093
Active Connections = 2
Welcome to server 192.168.184.1 : 9090
No Information found for client 127.0.0.1
```

5) Upload Data from client 2

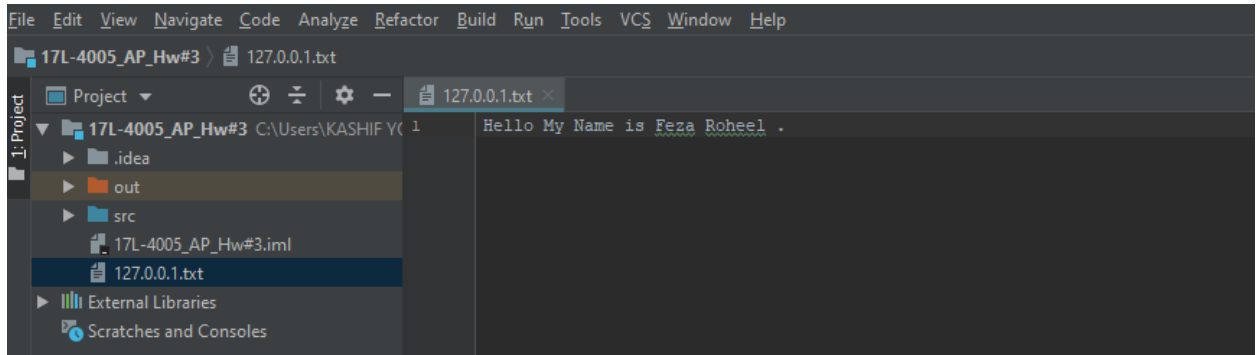


```
17E-4003_AP_FW#3.mml
127.0.0.1.txt
External Libraries
Scratches and Consoles

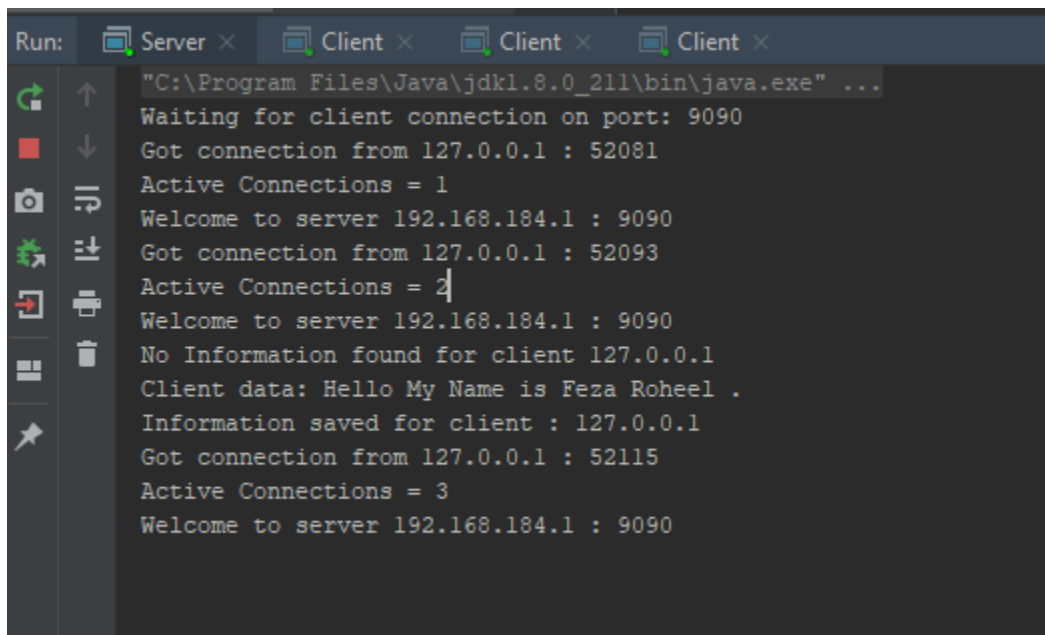
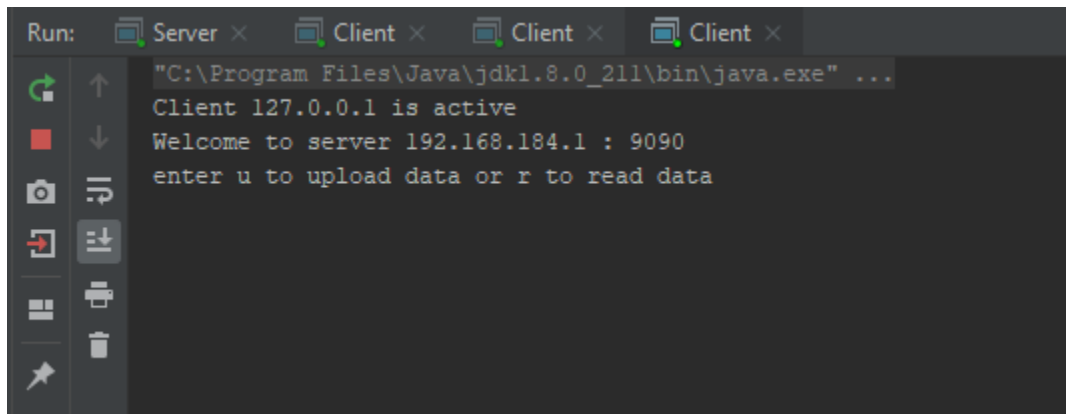
Run: Server x Client x Client x Client x
"C:\Program Files\Java\jdk1.8.0_211\bin\java.exe" ...
Client 127.0.0.1 is active
Welcome to server 192.168.184.1 : 9090
enter u to upload data or r to read data
u
Enter text to send to the Server
Hello My Name is Feza Roheel .
|
```



```
Run: Server x Client x Client x Client x
"C:\Program Files\Java\jdk1.8.0_211\bin\java.exe" ...
Waiting for client connection on port: 9090
Got connection from 127.0.0.1 : 52081
Active Connections = 1
Welcome to server 192.168.184.1 : 9090
Got connection from 127.0.0.1 : 52093
Active Connections = 2
Welcome to server 192.168.184.1 : 9090
No Information found for client 127.0.0.1
Client data: Hello My Name is Feza Roheel .
Information saved for client : 127.0.0.1
|
```



6) Lets start Client 3



7) Read From Client 3

```
Run: Server x Client x Client x Client x
"C:\Program Files\Java\jdk1.8.0_211\bin\java.exe" ...
Client 127.0.0.1 is active
Welcome to server 192.168.184.1 : 9090
enter u to upload data or r to read data
>
Reading data from the Server
[Data from Server]: Hello My Name is Feza Roheel .
|
```

```
Run: Server x Client x Client x Client x
"C:\Program Files\Java\jdk1.8.0_211\bin\java.exe" ...
Waiting for client connection on port: 9090
Got connection from 127.0.0.1 : 52081
Active Connections = 1
Welcome to server 192.168.184.1 : 9090
Got connection from 127.0.0.1 : 52093
Active Connections = 2
Welcome to server 192.168.184.1 : 9090
No Information found for client 127.0.0.1
Client data: Hello My Name is Feza Roheel .
Information saved for client : 127.0.0.1
Got connection from 127.0.0.1 : 52115
Active Connections = 3
Welcome to server 192.168.184.1 : 9090
Information for client 127.0.0.1
File content: Hello My Name is Feza Roheel .
```

```
127.0.0.1.txt x 127.0.0.1_192.168.184.1.txt x
1 Hello My Name is Feza Roheel .|
```

8) Upload Data from Client 1

```
Run: Server x Client x Client x Client x
"C:\Program Files\Java\jdk1.8.0_211\bin\java.exe" ...
Client 127.0.0.1 is active
Welcome to server 192.168.184.1 : 9090
enter u to upload data or r to read data
r
Reading data from the Server
[Data from Server]: No Information found
u
Enter text to send to the Server
I love to program in different languages.
```

```
Project 17L-4005_AP_Hw#3 C:\Users\KASHIF Y...
  .idea
  out
  src
  17L-4005_AP_Hw#3.iml
  127.0.0.1.txt
  127.0.0.1_192.168.184.1.txt
External Libraries
Scratches and Consoles

127.0.0.1.txt Hello My Name is Feza Roheel . I love to program in different languages.
127.0.0.1_192.168.184.1.txt

Run: Server x Client x Client x Client x
"C:\Program Files\Java\jdk1.8.0_211\bin\java.exe" ...
Waiting for client connection on port: 9090
Got connection from 127.0.0.1 : 52081
Active Connections = 1
Welcome to server 192.168.184.1 : 9090
Got connection from 127.0.0.1 : 52093
Active Connections = 2
Welcome to server 192.168.184.1 : 9090
No Information found for client 127.0.0.1
Client data: Hello My Name is Feza Roheel .
Information saved for client : 127.0.0.1
Got connection from 127.0.0.1 : 52115
Active Connections = 3
Welcome to server 192.168.184.1 : 9090
Information for client 127.0.0.1
File content: Hello My Name is Feza Roheel .
Client data: I love to program in different languages.
Information saved for client : 127.0.0.1
```

9) Read Data from Client 2

```
Run: Server x Client x Client x Client x
"C:\Program Files\Java\jdk1.8.0_211\bin\java.exe" ...
Client 127.0.0.1 is active
Welcome to server 192.168.184.1 : 9090
enter u to upload data or r to read data
u
Enter text to send to the Server
Hello My Name is Feza Roheel .
r
Reading data from the Server
[Data from Server]: Hello My Name is Feza Roheel . I love to program in different languages.
```

```
Server x Client x Client x Client x
"C:\Program Files\Java\jdk1.8.0_211\bin\java.exe" ...
Waiting for client connection on port: 9090
Got connection from 127.0.0.1 : 52081
Active Connections = 1
Welcome to server 192.168.184.1 : 9090
Got connection from 127.0.0.1 : 52093
Active Connections = 2
Welcome to server 192.168.184.1 : 9090
No Information found for client 127.0.0.1
Client data: Hello My Name is Feza Roheel .
Information saved for client : 127.0.0.1
Got connection from 127.0.0.1 : 52115
Active Connections = 3
Welcome to server 192.168.184.1 : 9090
Information for client 127.0.0.1
File content: Hello My Name is Feza Roheel .
Client data: I love to program in different languages.
Information saved for client : 127.0.0.1
Information for client 127.0.0.1
File content: Hello My Name is Feza Roheel . I love to program in different languages.
```

```
4.1.txt
127.0.0.1.txt x 127.0.0.1_192.168.184.1.txt x
( 1 Hello My Name is Feza Roheel . I love to program in different languages.
```

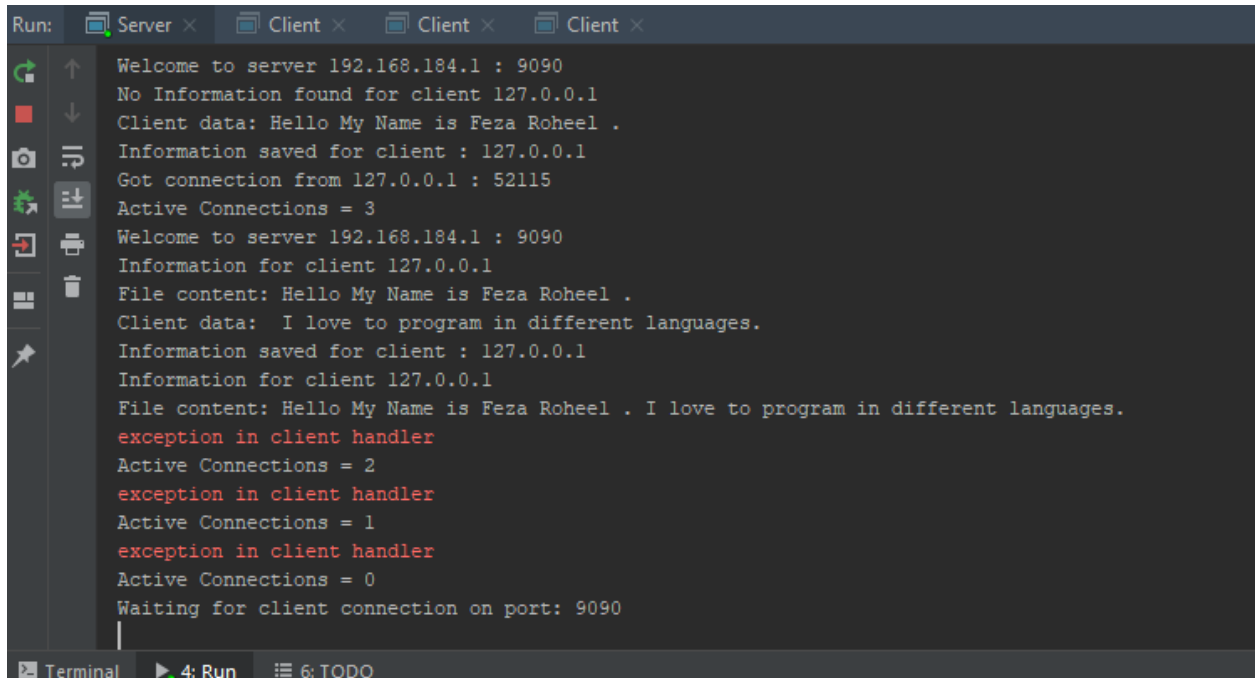
10) Close Client1


```
Server x Client x Client x Client x
↑
↓
⏮
⏭
📄
🗑
Got connection from 127.0.0.1 : 52081
Active Connections = 1
Welcome to server 192.168.184.1 : 9090
Got connection from 127.0.0.1 : 52093
Active Connections = 2
Welcome to server 192.168.184.1 : 9090
No Information found for client 127.0.0.1
Client data: Hello My Name is Feza Roheel .
Information saved for client : 127.0.0.1
Got connection from 127.0.0.1 : 52115
Active Connections = 3
Welcome to server 192.168.184.1 : 9090
Information for client 127.0.0.1
File content: Hello My Name is Feza Roheel .
Client data: I love to program in different languages.
Information saved for client : 127.0.0.1
Information for client 127.0.0.1
File content: Hello My Name is Feza Roheel . I love to program in different languages.
exception in client handler
Active Connections = 2
```

11) Close Client2

```
Server x Client x Client x Client x
↑
↓
⏮
⏭
📄
🗑
Welcome to server 192.168.184.1 : 9090
Got connection from 127.0.0.1 : 52093
Active Connections = 2
Welcome to server 192.168.184.1 : 9090
No Information found for client 127.0.0.1
Client data: Hello My Name is Feza Roheel .
Information saved for client : 127.0.0.1
Got connection from 127.0.0.1 : 52115
Active Connections = 3
Welcome to server 192.168.184.1 : 9090
Information for client 127.0.0.1
File content: Hello My Name is Feza Roheel .
Client data: I love to program in different languages.
Information saved for client : 127.0.0.1
Information for client 127.0.0.1
File content: Hello My Name is Feza Roheel . I love to program in different languages.
exception in client handler
Active Connections = 2
exception in client handler
Active Connections = 1
```

12) Close Client3



```
Run: Server x Client x Client x Client x
Welcome to server 192.168.184.1 : 9090
No Information found for client 127.0.0.1
Client data: Hello My Name is Feza Roheel .
Information saved for client : 127.0.0.1
Got connection from 127.0.0.1 : 52115
Active Connections = 3
Welcome to server 192.168.184.1 : 9090
Information for client 127.0.0.1
File content: Hello My Name is Feza Roheel .
Client data: I love to program in different languages.
Information saved for client : 127.0.0.1
Information for client 127.0.0.1
File content: Hello My Name is Feza Roheel . I love to program in different languages.
exception in client handler
Active Connections = 2
exception in client handler
Active Connections = 1
exception in client handler
Active Connections = 0
Waiting for client connection on port: 9090
Terminal 4: Run 6: TODO
```

As you can see since 0 active connections, it displays waiting for connection on port on Server.