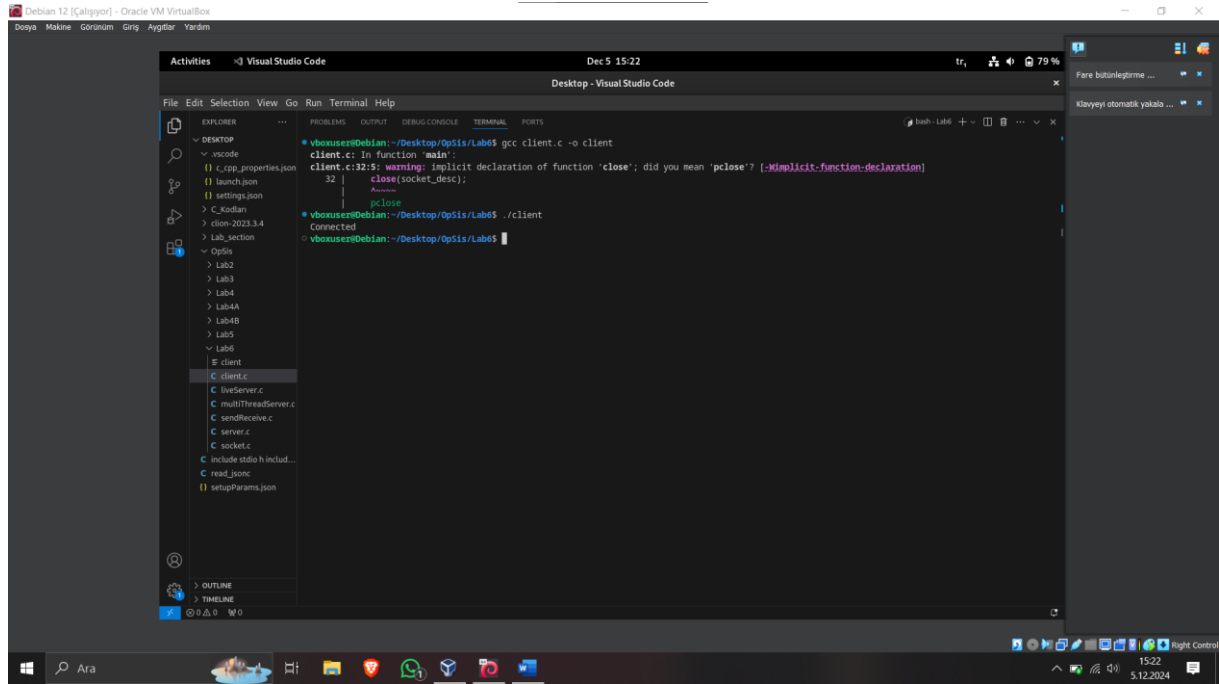


# Çağrı AYDIN – 2021510010 – Lab 6

## PART A – Task 1

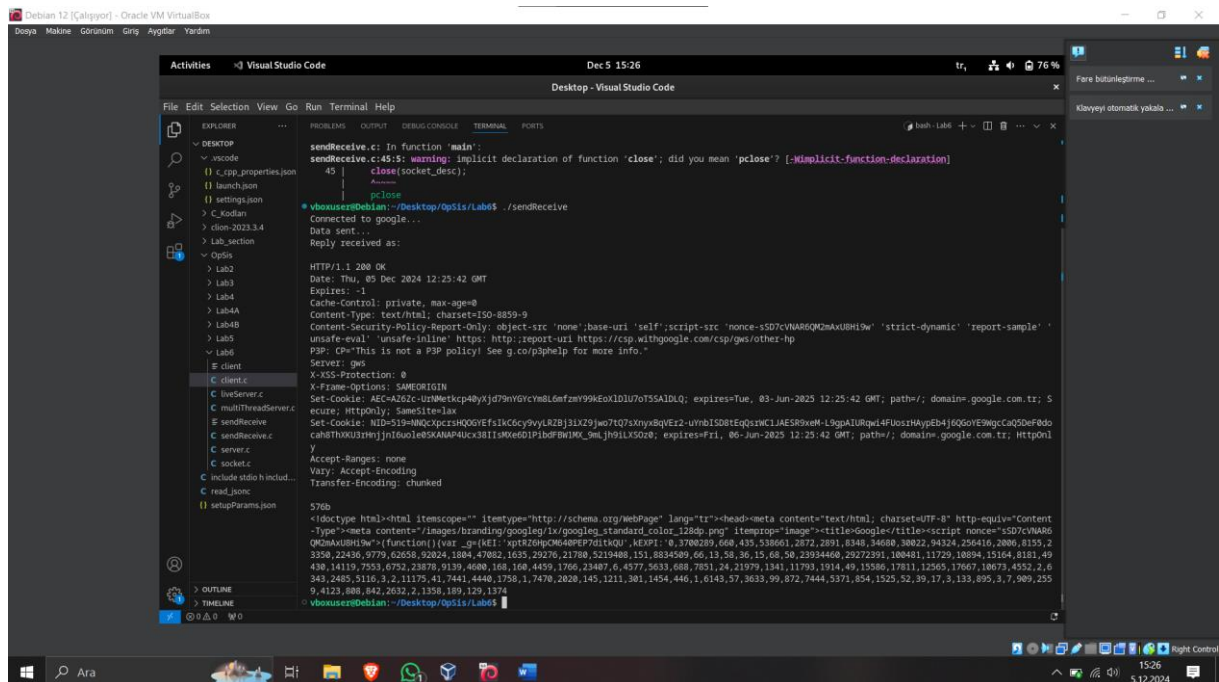
In Task 1 when I copy and paste 216.58.209.4 to the browser it ends up in Google's main page.

Screenshot:



## Task 2

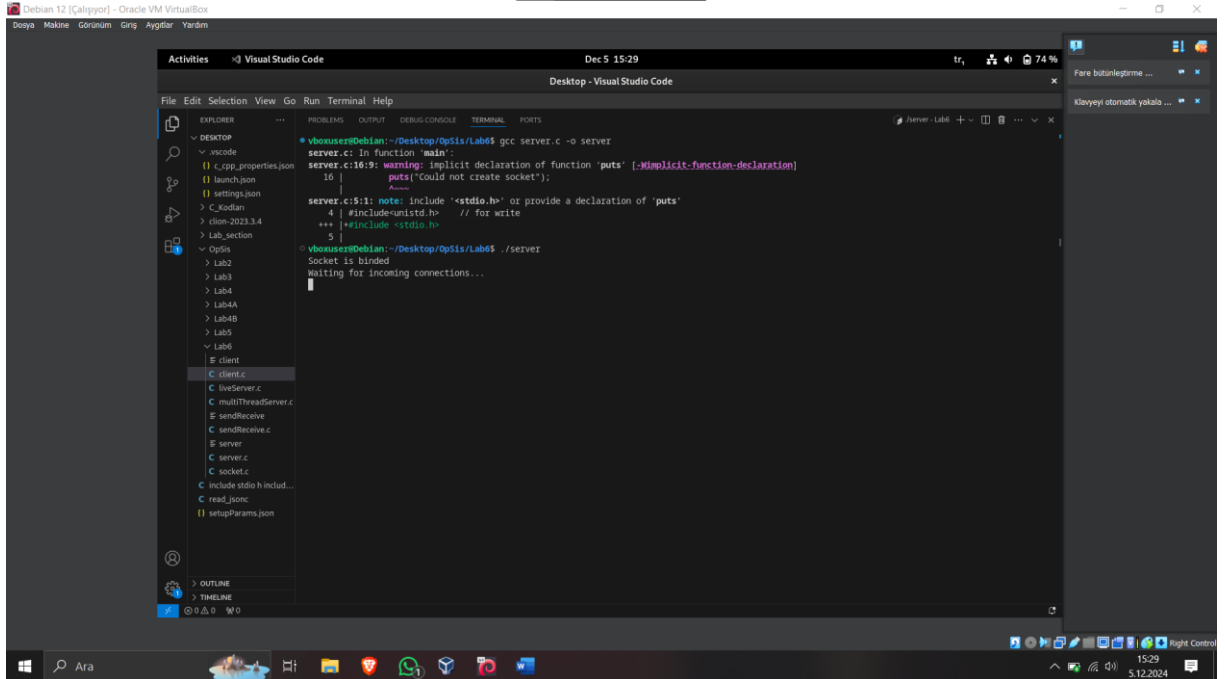
Screenshot:



## PART B

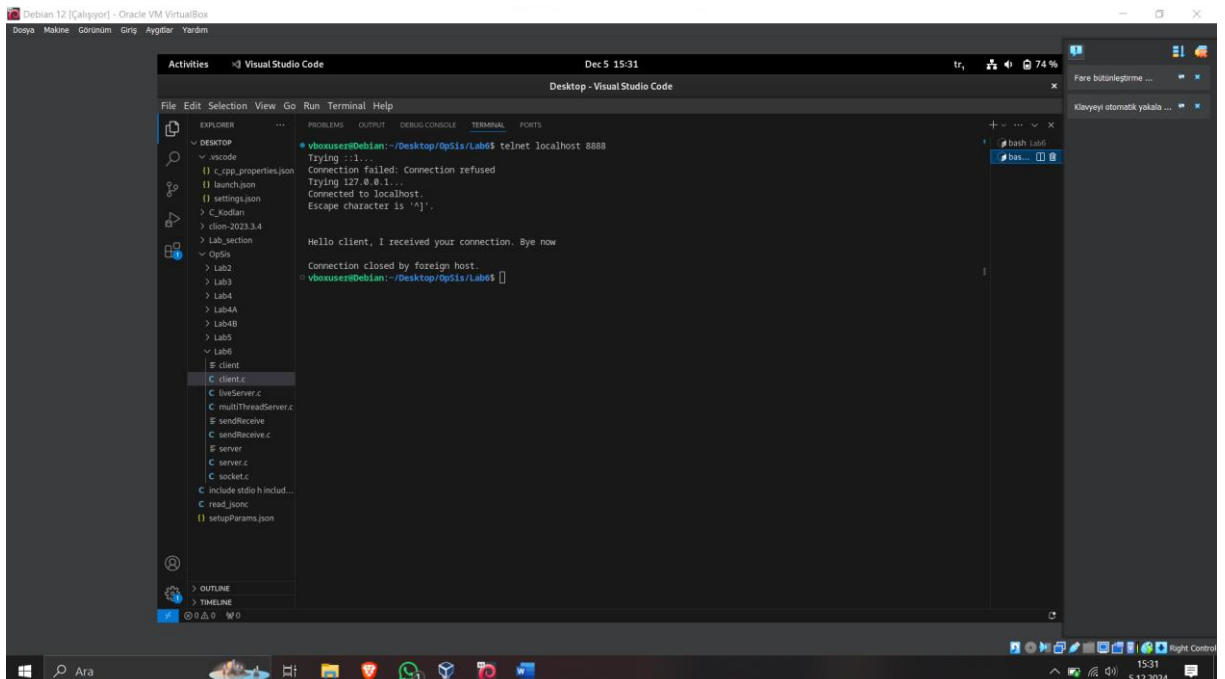
### Task 3:

In this task we created a local server named server and connected to our server with another terminal using telnet.



The screenshot shows the Visual Studio Code interface with a C program named 'server.c' being compiled and executed. The code in 'server.c' includes `<stdio.h>` and `<unistd.h>`, and defines a `main` function that creates a socket, binds it to `localhost` on port `8888`, and enters a loop to accept connections and print the received data. The terminal output shows the successful compilation of `server.c` into `server` and the execution of `./server`, which prints 'Socket is binded' and 'Waiting for incoming connections...'. The Explorer sidebar shows the project structure with files like `client.c`, `liveServer.c`, `multiThreadServer.c`, `sendReceive.c`, `server.c`, and `socket.c`.

```
server.c: In function 'main':
server.c:16:9: warning: implicit declaration of function 'puts' [-Wimplicit-function-declaration]
   16 |         puts("could not create socket");
      |         ^~~~~
server.c:5:1: note: include '<stdio.h>' or provide a declaration of 'puts'
    5 | }
      | ^
server.c:4:1: note: #include '<unistd.h>' // for write
    4 | #include '<unistd.h>'
      | ^~~~~
vboxuser@Debian:~/Desktop/Opsis/Lab6$ ./server
Socket is binded
Waiting for incoming connections...
```

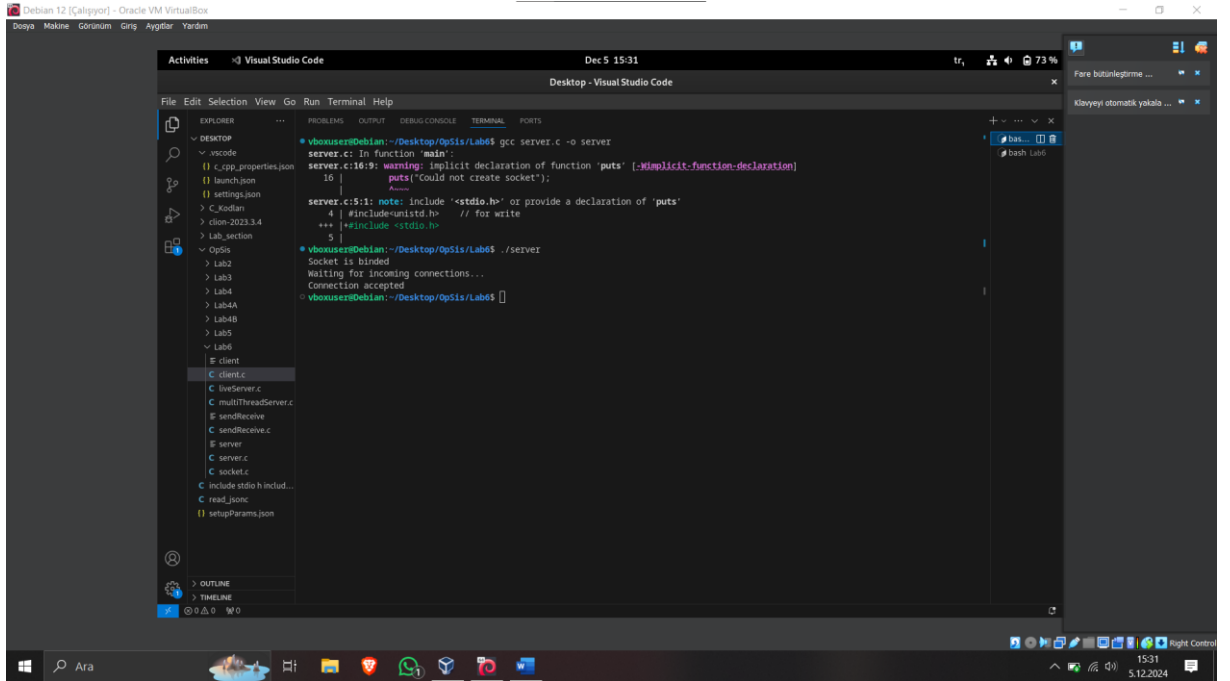


The screenshot shows the Visual Studio Code interface with a telnet client being used to connect to the local server. The terminal output shows the command `telnet localhost 8888` being executed, which results in a successful connection. The client sends a message, and the server responds with 'Hello client, I received your connection. Bye now'. The connection is then closed. The Explorer sidebar shows the project structure with files like `client.c`, `liveServer.c`, `multiThreadServer.c`, `sendReceive.c`, `server.c`, and `socket.c`.

```
vboxuser@Debian:~/Desktop/Opsis/Lab6$ telnet localhost 8888
Trying ::1...
Connection failed: Connection refused
Trying 127.0.0.1...
Connected to localhost.
Escape character is '^['.

Hello client, I received your connection. Bye now

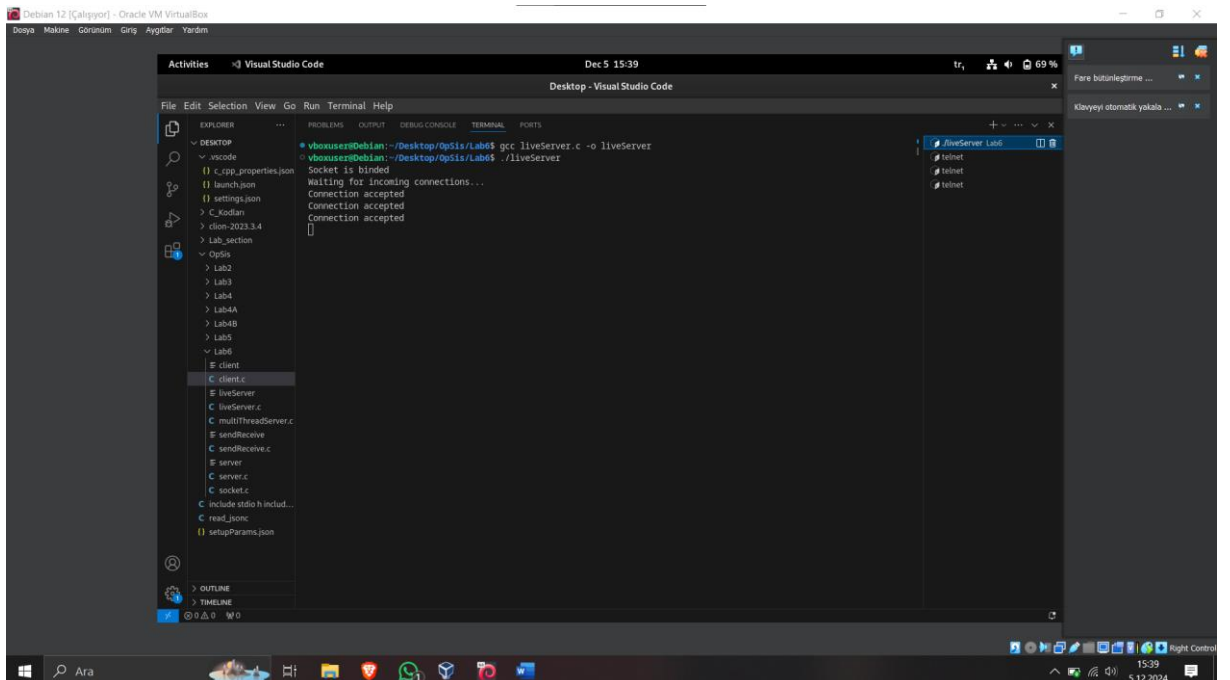
Connection closed by foreign host.
vboxuser@Debian:~/Desktop/Opsis/Lab6$
```



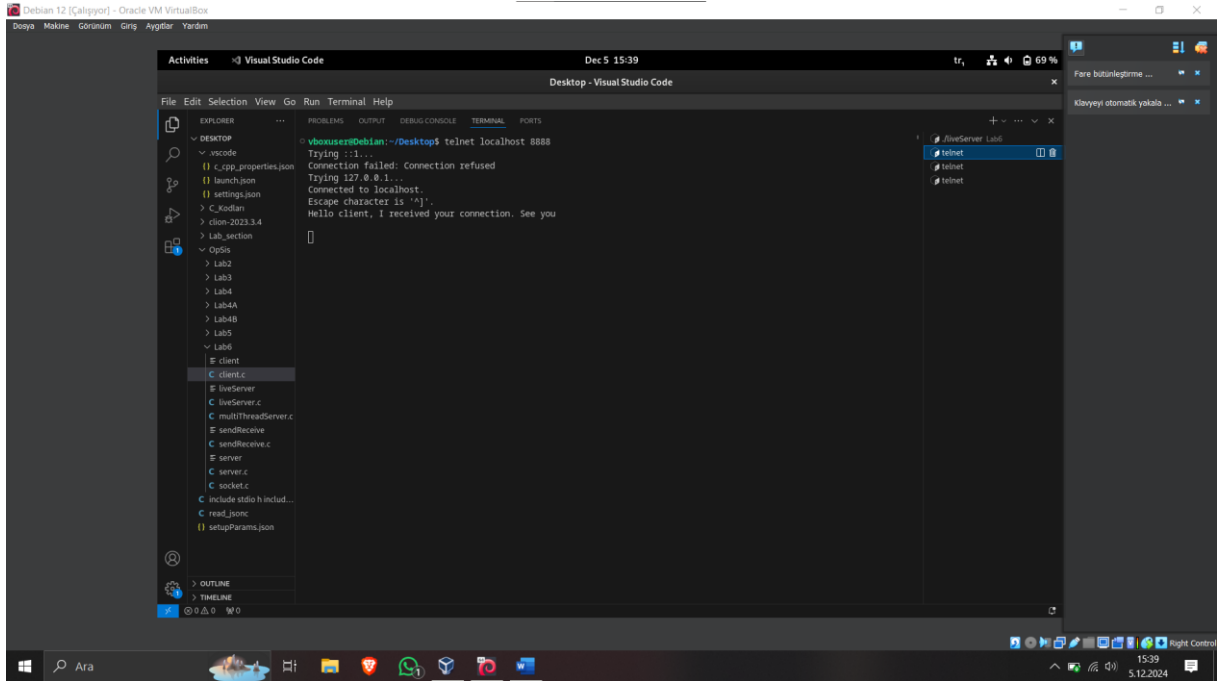
## Task 4:

In this task we created a local host and connected 3 different terminals via telnet and after killing the main terminal which is executed the live server all the 3 other terminals lost their connection with main terminal.

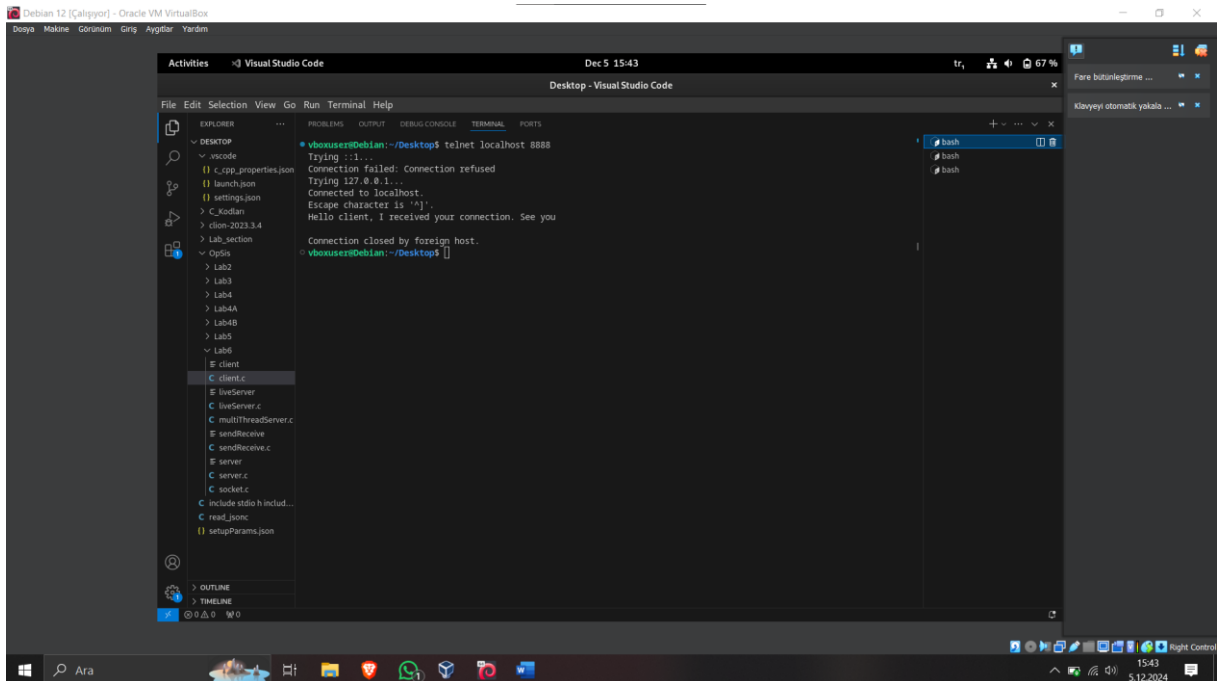
Screenshot after connecting 3 terminals to local server:



Terminal that connected to our local server:



After killing live server terminal our connected terminals:



**TASK 5:**

