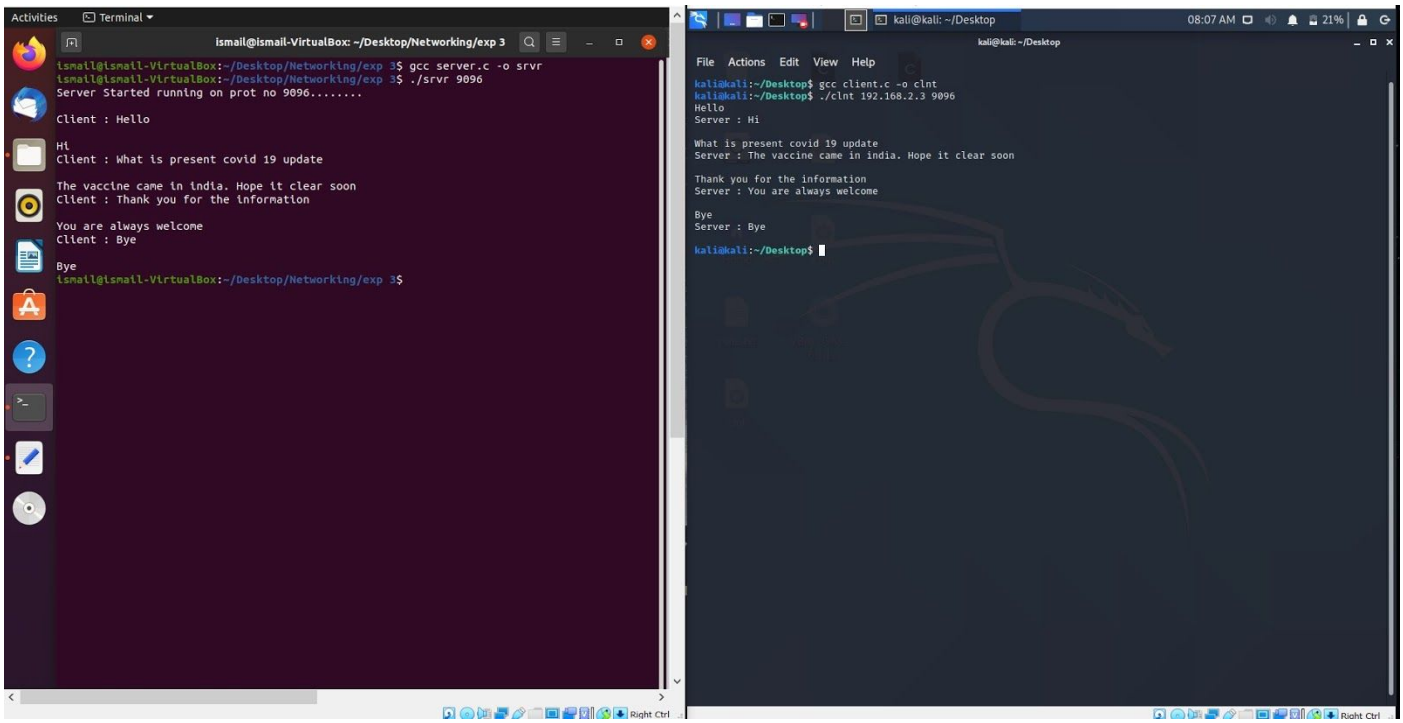
TCP Client Server Program



For compiling server program:

gcc server.c -o srvr

./srvr port_no

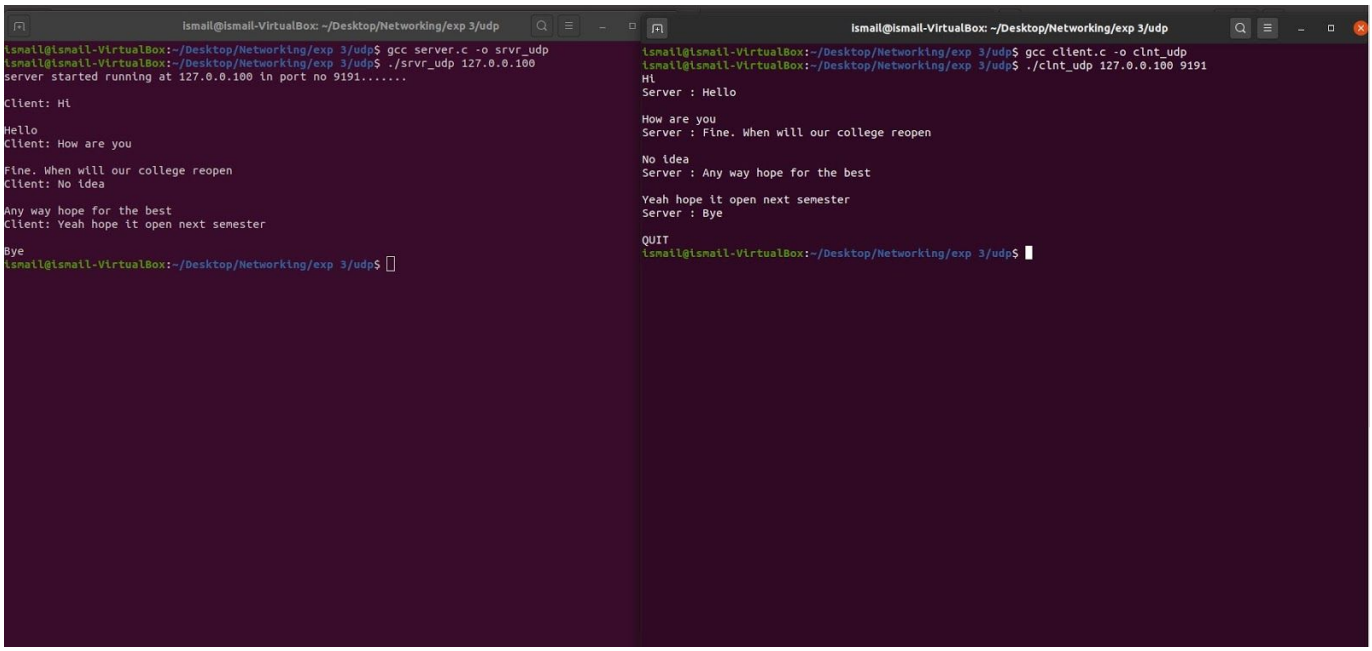
For compiling client program:

gcc client.c -o clnt

./clnt server_ip_address server_port_no

I have given the server IP address as INADDR_ANY, so that the socket will bind with all the available interfaces. Server is running on an Ubuntu Virtual Machine. It is internally network connected with kali linux VM. ubuntu VM IP Address is statically allocated to 192.168.2.3 and kali is also in the same network. Now kali runs the client program by giving the server ip address and port no as the arguments in the terminal. The program is basically using the TCP socket for communicating for a chat application where client can send some text and server can reply for that. The connection is closed when anyone says “Bye”.

UDP Client Server Program



For compiling server program:

gcc server.c -o srvr_udp

./srvr_udp ip_address

For compiling client program:

gcc client.c -o clnt_udp

./clnt server_ip_address server_port_no

Here I have hardcoded the port no 9191 for the server. Here the client and server are on the same device. So I have used the local host ip address for the server. For client, the command line argument should have the ip address and port no of the server. This application is also a chat application as discussed before which uses the UDP socket for communication and the connection closes when someone says “QUIT”.