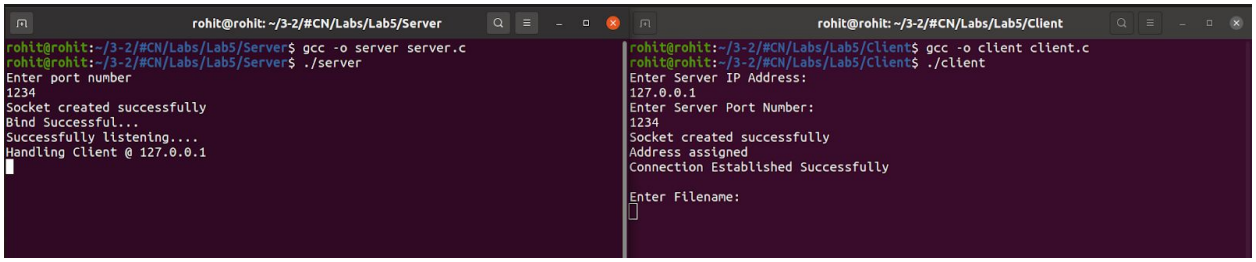
ROHIT GARG (2018A7PS0193G)

COMPUTER NETWORKS
CS F303
LAB5

On running ./server, the server will accept its port number as the input parameter. (5 marks)

Upon running the client executable(./client), it asks for:
Server IP Address,
Server Port Number and then the
filename to be requested:

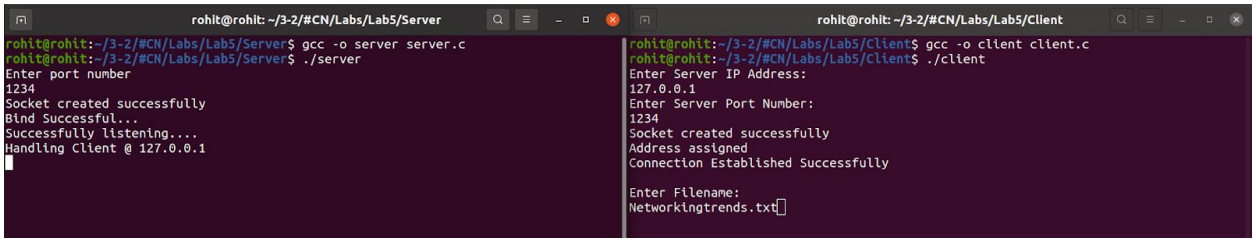
After taking the address and port, the client connects to the Server and connection is established successfully.
Here, Port number used = 1234
Server IP Address used = 127.0.0.1

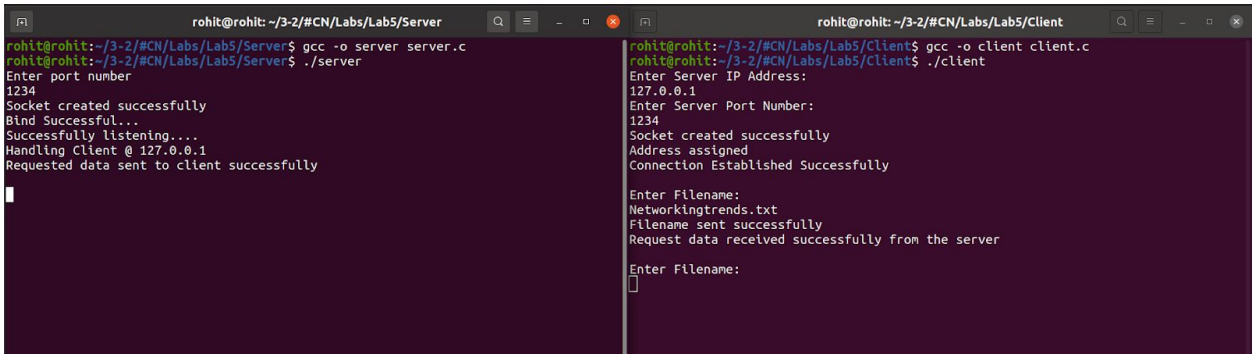


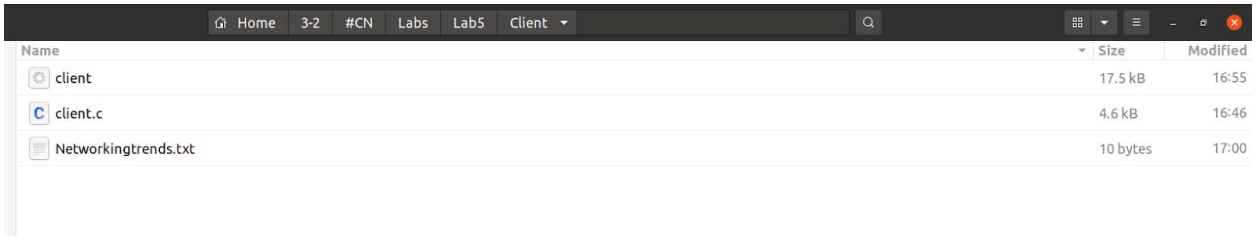
Note: Use Port Number > 1024 because port numbers below those are reserved for OS usages and may result in error

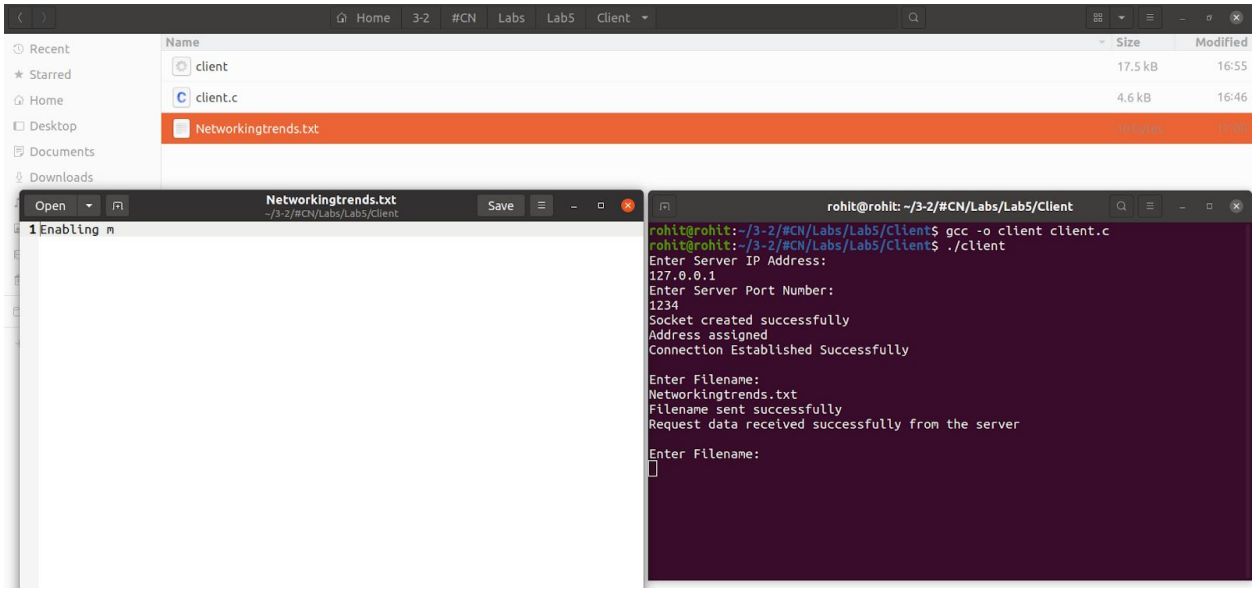
When a filename is entered that exists in the server's directory, the server retrieves the first 10 bytes from the file and returns the same to the client, which then creates a file (with the given filename) with the received message in it:

Entering filename = networkingtrends.txt



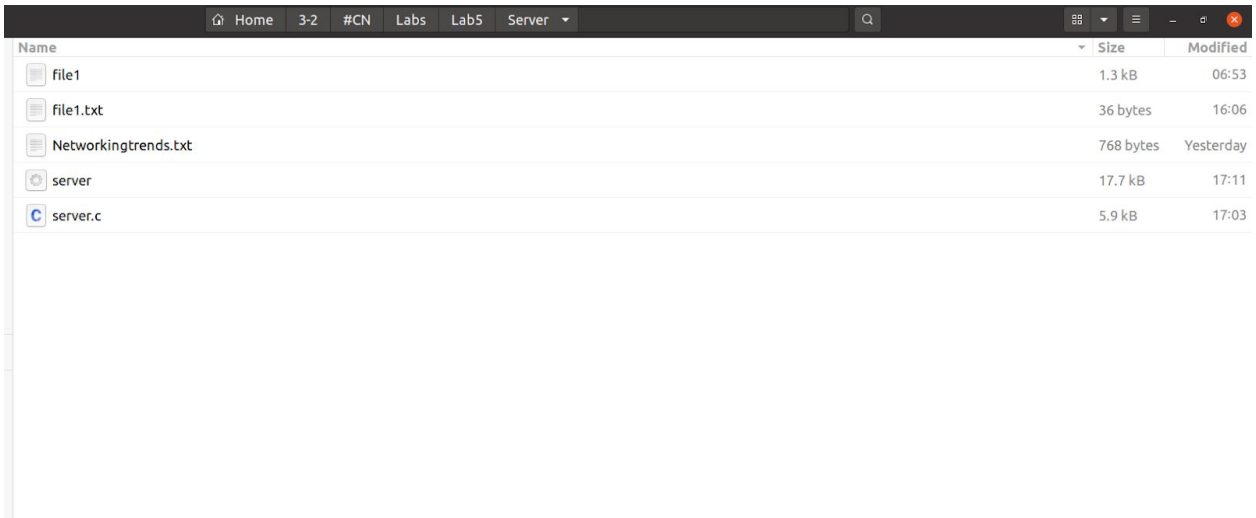


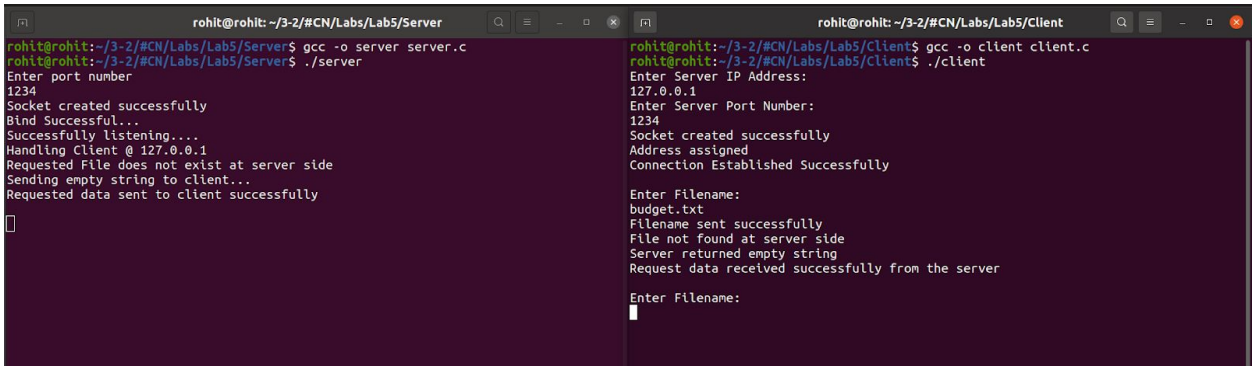




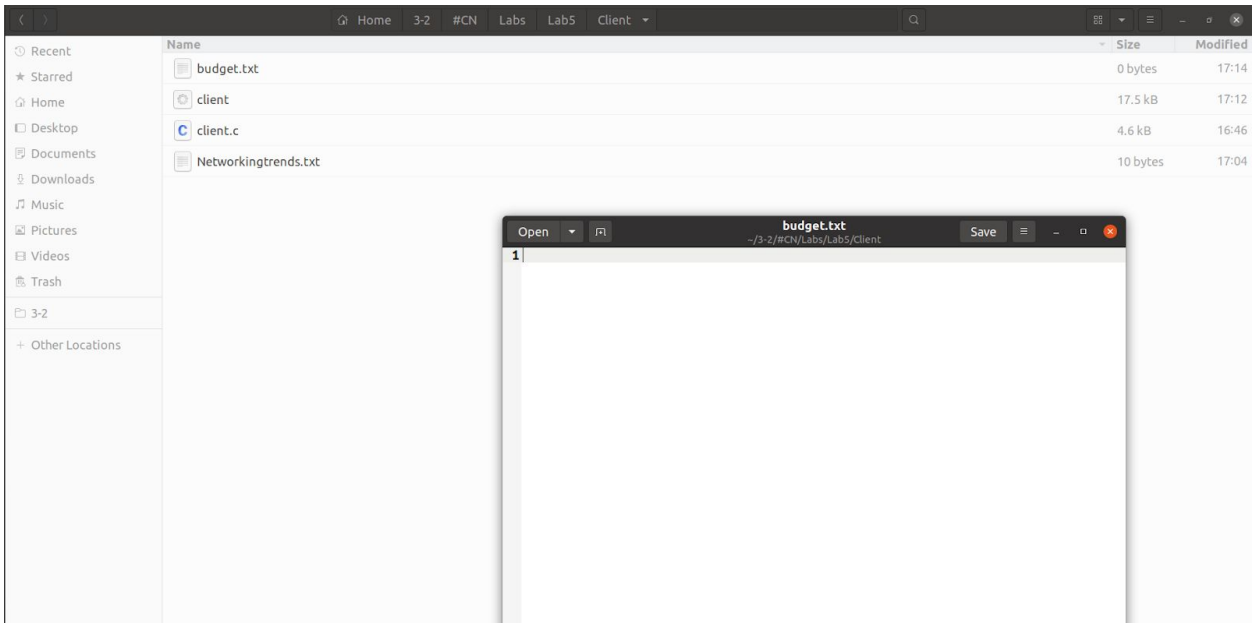
When a filename is requested that does not exist in the server's directory, the server returns an empty string to the client and the client shows that no such file was present on the server and makes an empty file, with the entered filename:

We will try to request filename = budget since it does not exist at the server side.



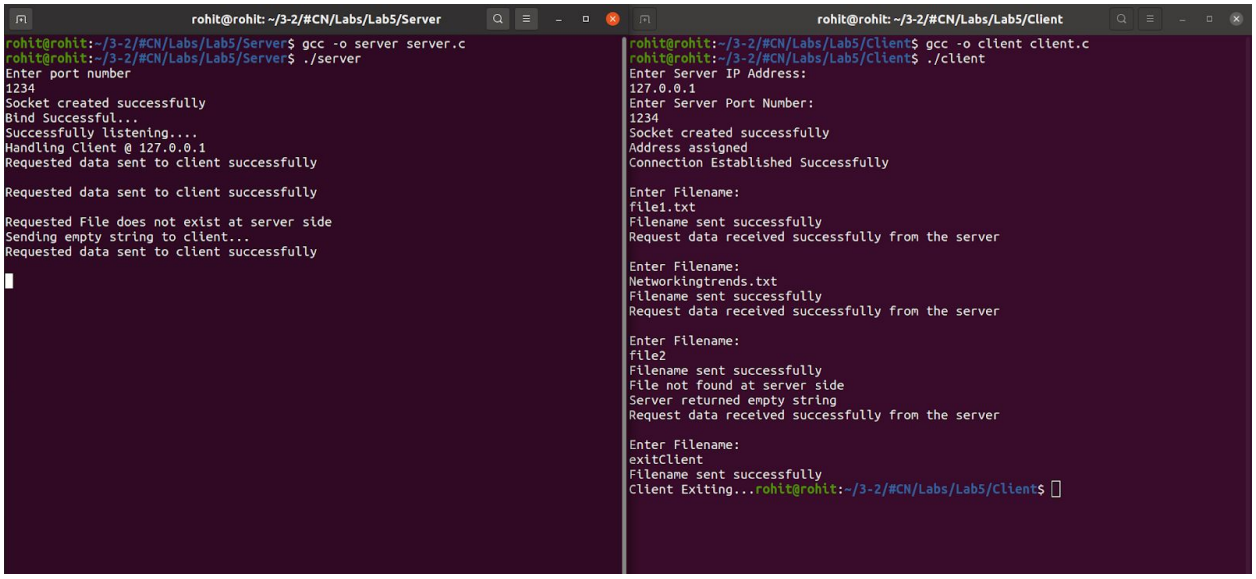


server sends an empty string to client

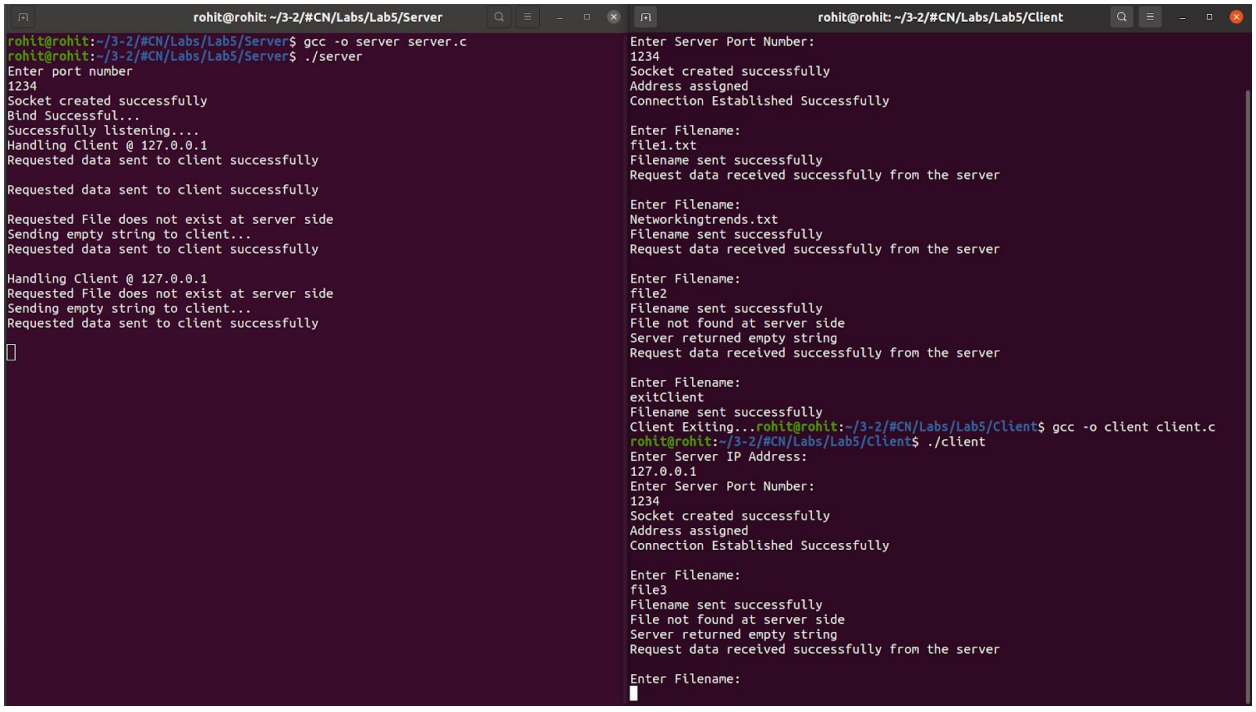


The server repeatedly waits for a filename and a client can send multiple requests to the server.

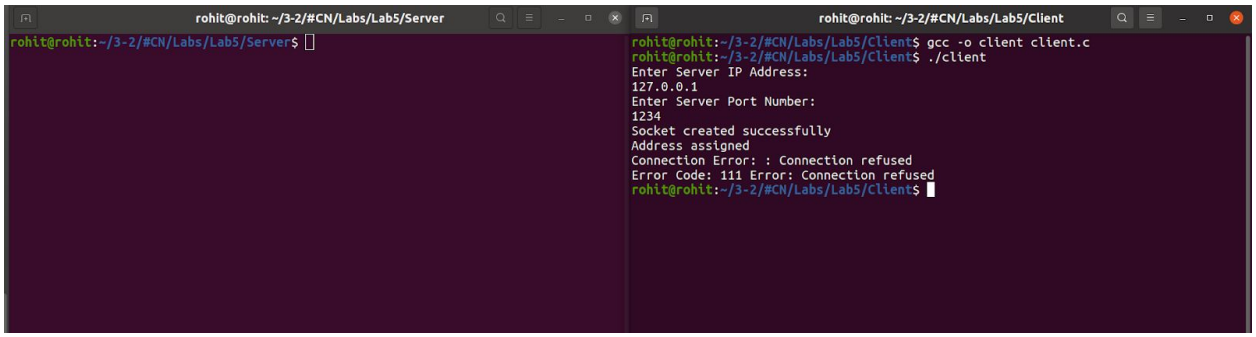
When exitClient as filename is passed on the client terminal, the client program exits while server does not exit and waits for a new client



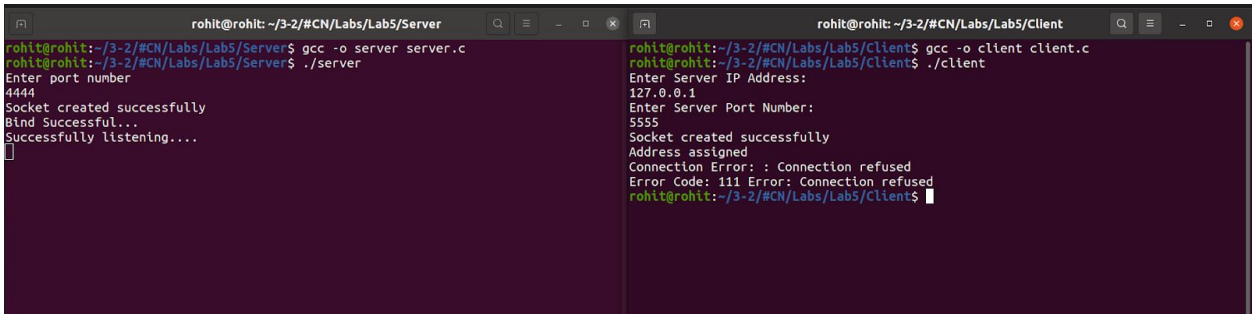
When the above client left, a new client joins the server.
A new client joins the server at same IP and port number. This is denoted by Handling Client @.... statement



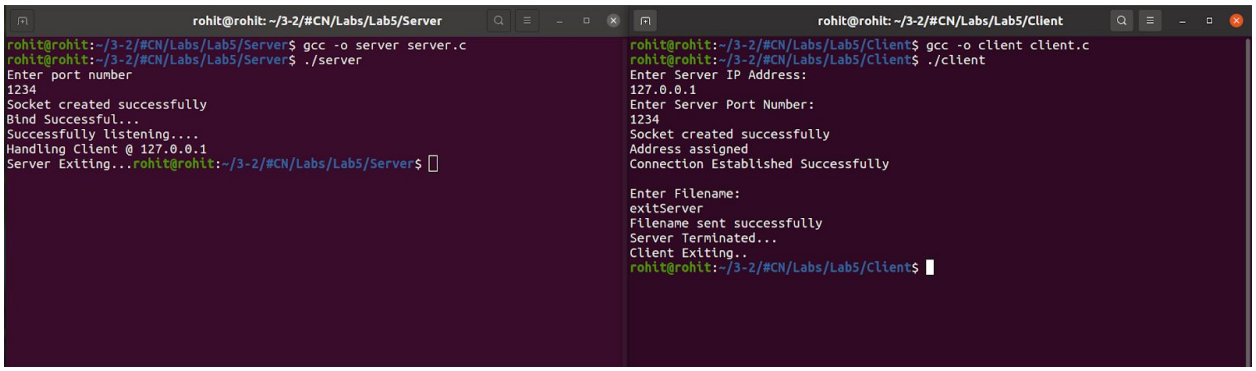
If the server is not running/unreachable or the client enters an address or port the server is not listening on, an error code given by errno along with statement is displayed showing that connection to server failed/refused:



If different port numbers at client and server terminals are given then also connection will be refused along with error code displayed.



For exiting the server, pass exitServer as filename at client terminal.



Note: server can also be exited using Ctrl + c. In this case, client will be notified when it queries the server next time for any file data.

When a client tries to send data to the server, it is notified that the server exited so it also exits along with it.