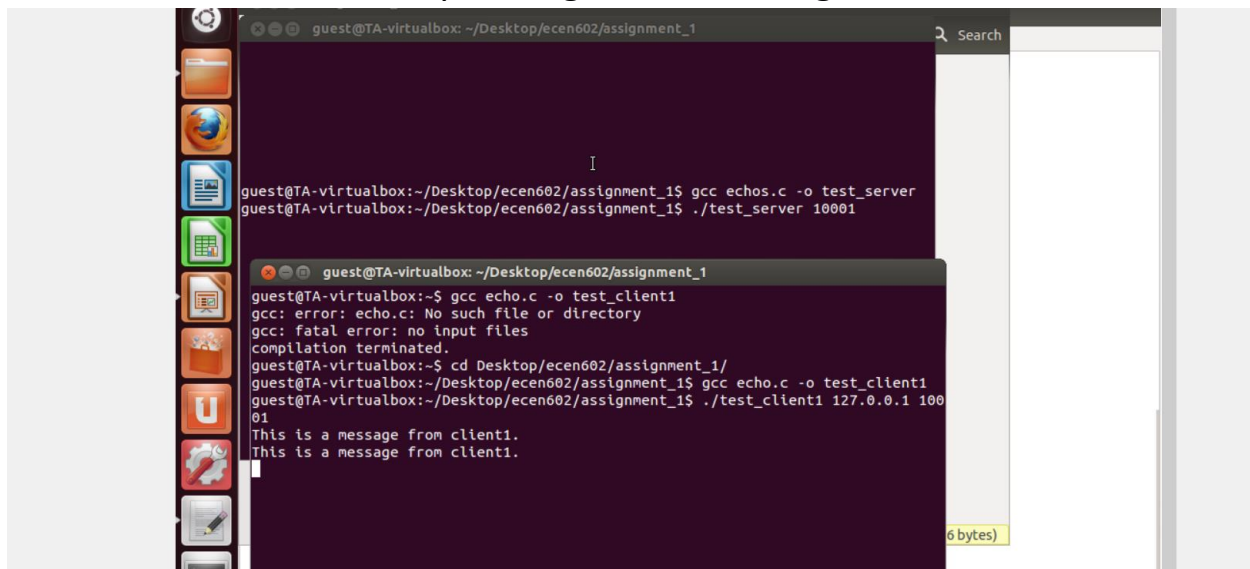


## Test Case 01 : Server responding to the message.



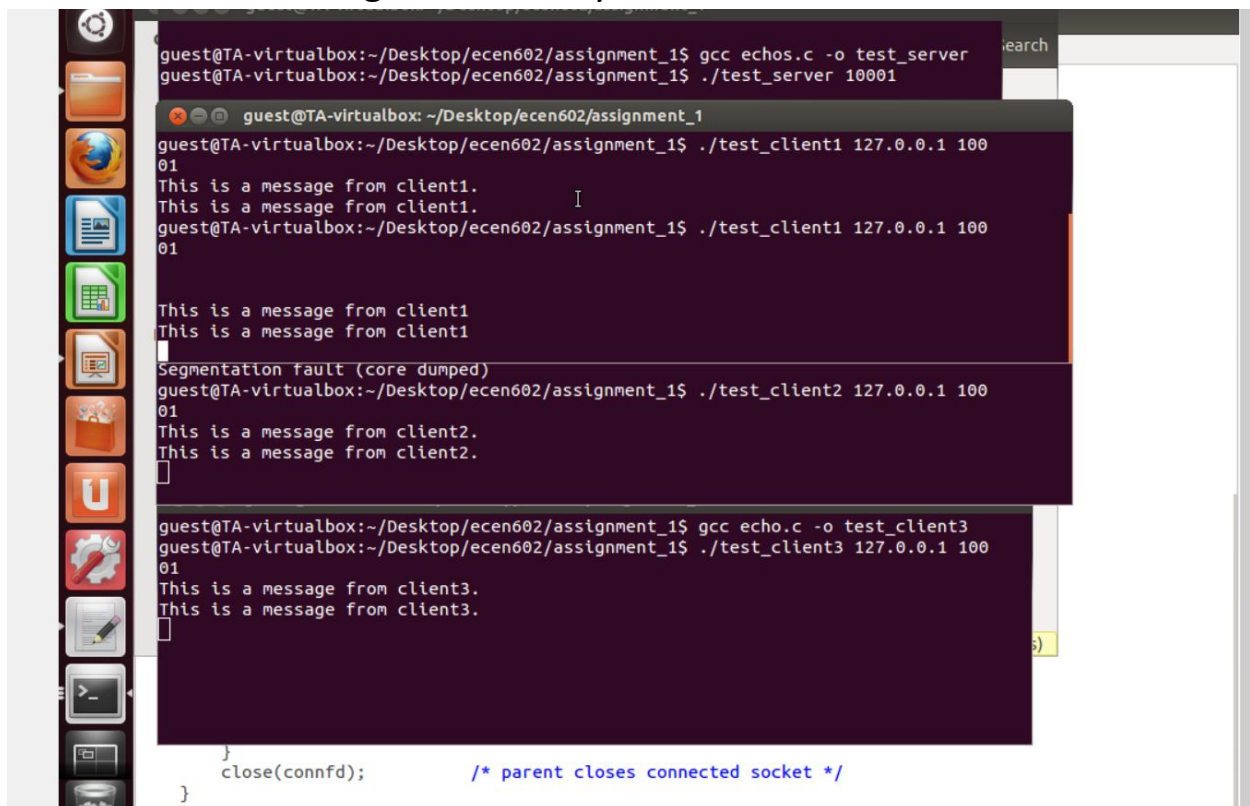
The screenshot shows a terminal window with a dark purple background. The prompt is `guest@TA-virtualbox: ~/Desktop/ecen602/assignment_1`. The user enters `gcc echos.c -o test_server` and then `./test_server 10001`. The server is running. In the foreground, another terminal window is open with the same prompt. The user enters `gcc echo.c -o test_client1`, which results in an error: `gcc: error: echo.c: No such file or directory` and `gcc: fatal error: no input files`. The user then enters `cd Desktop/ecen602/assignment_1/`. The user then enters `gcc echo.c -o test_client1` and `./test_client1 127.0.0.1 10001`. The output shows `This is a message from client1.` twice. A yellow status bar at the bottom right of the foreground window indicates `6 bytes`.

```
guest@TA-virtualbox:~/Desktop/ecen602/assignment_1$ gcc echos.c -o test_server
guest@TA-virtualbox:~/Desktop/ecen602/assignment_1$ ./test_server 10001

I

guest@TA-virtualbox:~/Desktop/ecen602/assignment_1$ gcc echo.c -o test_client1
gcc: error: echo.c: No such file or directory
gcc: fatal error: no input files
compilation terminated.
guest@TA-virtualbox:~/Desktop/ecen602/assignment_1$ cd Desktop/ecen602/assignment_1/
guest@TA-virtualbox:~/Desktop/ecen602/assignment_1$ gcc echo.c -o test_client1
guest@TA-virtualbox:~/Desktop/ecen602/assignment_1$ ./test_client1 127.0.0.1 10001
This is a message from client1.
This is a message from client1.
```

## Test Case 02 : Forking functionality of server.



The screenshot shows a terminal window with a dark purple background. The prompt is `guest@TA-virtualbox: ~/Desktop/ecen602/assignment_1`. The user enters `gcc echos.c -o test_server` and then `./test_server 10001`. The server is running. In the foreground, another terminal window is open with the same prompt. The user enters `./test_client1 127.0.0.1 10001`. The output shows `This is a message from client1.` twice. The user then enters `./test_client1 127.0.0.1 10001`. The output shows `This is a message from client1.` twice. The user then enters `./test_client2 127.0.0.1 10001`. The output shows `This is a message from client2.` twice. The user then enters `gcc echo.c -o test_client3` and `./test_client3 127.0.0.1 10001`. The output shows `This is a message from client3.` twice. A yellow status bar at the bottom right of the foreground window indicates `6 bytes`. Below the terminal window, a code snippet is visible:

```
}
close(connfd);          /* parent closes connected socket */
}
```

```

guest@TA-virtualbox:~/Desktop/ecen602/assignment_1$ ./test_server 10001

guest@TA-virtualbox: ~/Desktop/ecen602/assignment_1
guest@TA-virtualbox:~/Desktop/ecen602/assignment_1$ ./test_client1 127.0.0.1 100
01
This is a message from client1.
This is a message from client1.
guest@TA-virtualbox:~/Desktop/ecen602/assignment_1$ ./test_client1 127.0.0.1 100
01

This is a message from client1
This is a message from client1
guest@TA-virtualbox:~/Desktop/ecen602/assignment_1$
Segmentation fault (core dumped)

```

[illegible]