

Proof that the server compiles, prints its port and IP, and accepts upto 5 clients, printing the client's IP and port on connecting. Every client who gets accepted is prompted for a string.

```

Lab7 Final — script — server — 89x31
(base) kunalkariwala@Lmaoo-1 Lab7 Final % script
Script started, output file is typescript
Restored session: Wed Mar 30 20:58:29 IST 2022
(base) kunalkariwala@Lmaoo-1 Lab7 Final % gcc -o server ./server.c -lpthread
./server.c:58:1: warning: non-void function does not return a value [-Wreturn-type]
}
^
1 warning generated.
(base) kunalkariwala@Lmaoo-1 Lab7 Final % ./server 4444
[*]Server is active on [127.0.0.1: 4444]
[*]Connection accepted from 127.0.0.1:51280
[*]Connection accepted from 127.0.0.1:51281
[*]Connection accepted from 127.0.0.1:51282
[*]Connection accepted from 127.0.0.1:51283
[*]Connection accepted from 127.0.0.1:51284
[]

Lab7 Final — client 127.0.0.1 4444 — 89x8
(base) kunalkariwala@Lmaoo-1 Lab7 Final % ./client 127.0.0.1 4444
[*]Connection Accepted!
[*]Enter any string, type quit if you want to disconnect
[]

Lab7 Final — -zsh — 89x11
(base) kunalkariwala@Lmaoo-1 Lab7 Final % ./client 127.0.0.1 4444
[*]Connection refused! Server is full
(base) kunalkariwala@Lmaoo-1 Lab7 Final %

Lab7 Final — script — client — 114x7
char * servAdd = argv[1];
^
1 warning generated.
(base) kunalkariwala@Lmaoo-1 Lab7 Final % ./client 127.0.0.1 4444
[*]Connection Accepted!
[*]Enter any string, type quit if you want to disconnect
[]

Lab7 Final — client 127.0.0.1 4444 — 113x8
(base) kunalkariwala@Lmaoo-1 Lab7 Final % ./client 127.0.0.1 4444
[*]Connection Accepted!
[*]Enter any string, type quit if you want to disconnect
[]

Lab7 Final — client 127.0.0.1 4444 — 113x11
(base) kunalkariwala@Lmaoo-1 Lab7 Final % ./client 127.0.0.1 4444
[*]Connection Accepted!
[*]Enter any string, type quit if you want to disconnect
[]

Lab7 Final — client 127.0.0.1 4444 — 113x8
(base) kunalkariwala@Lmaoo-1 Lab7 Final % ./client 127.0.0.1 4444
[*]Connection Accepted!
[*]Enter any string, type quit if you want to disconnect
[]

Lab7 Final — -zsh — 113x11
(base) kunalkariwala@Lmaoo-1 Lab7 Final % ./client 127.0.0.1 4444
[*]Connection refused! Server is full
(base) kunalkariwala@Lmaoo-1 Lab7 Final %

```

Proof that the server prints the string entered in any child whose connection was accepted.

```

Lab7 Final — script — server — 89x31
(base) kunalkariwala@Lmaoo-1 Lab7 Final % script
Script started, output file is typescript
Restored session: Wed Mar 30 20:58:29 IST 2022
(base) kunalkariwala@Lmaoo-1 Lab7 Final % gcc -o server ./server.c -lpthread
./server.c:58:1: warning: non-void function does not return a value [-Wreturn-type]
}
^
1 warning generated.
(base) kunalkariwala@Lmaoo-1 Lab7 Final % ./server 4444
[*]Server is active on [127.0.0.1: 4444]
[*]Connection accepted from 127.0.0.1:51280
[*]Connection accepted from 127.0.0.1:51281
[*]Connection accepted from 127.0.0.1:51282
[*]Connection accepted from 127.0.0.1:51283
[*]Connection accepted from 127.0.0.1:51284
[*]Client with ip:port as 127.0.0.1:51280 sent : printing from client 1
[*]Client with ip:port as 127.0.0.1:51281 sent : printing from client 2
[*]Client with ip:port as 127.0.0.1:51282 sent : printing from client 3
[*]Client with ip:port as 127.0.0.1:51281 sent : printing from client 2 again
[*]Client with ip:port as 127.0.0.1:51283 sent : printing from client 4
[*]Client with ip:port as 127.0.0.1:51284 sent : hey I am the last client
[]

Lab7 Final — client 127.0.0.1 4444 — 89x8
(base) kunalkariwala@Lmaoo-1 Lab7 Final % ./client 127.0.0.1 4444
[*]Connection Accepted!
[*]Enter any string, type quit if you want to disconnect
printing from client 4
[*]Enter any string, type quit if you want to disconnect
[]

Lab7 Final — -zsh — 89x11
(base) kunalkariwala@Lmaoo-1 Lab7 Final % ./client 127.0.0.1 4444
[*]Connection refused! Server is full
(base) kunalkariwala@Lmaoo-1 Lab7 Final %

Lab7 Final — script — client — 114x7
1 warning generated.
(base) kunalkariwala@Lmaoo-1 Lab7 Final % ./client 127.0.0.1 4444
[*]Connection Accepted!
[*]Enter any string, type quit if you want to disconnect
printing from client 1
[*]Enter any string, type quit if you want to disconnect
[]

Lab7 Final — client 127.0.0.1 4444 — 113x8
(base) kunalkariwala@Lmaoo-1 Lab7 Final % ./client 127.0.0.1 4444
[*]Connection Accepted!
[*]Enter any string, type quit if you want to disconnect
printing from client 2
[*]Enter any string, type quit if you want to disconnect
printing from client 2 again
[*]Enter any string, type quit if you want to disconnect
[]

Lab7 Final — client 127.0.0.1 4444 — 113x11
(base) kunalkariwala@Lmaoo-1 Lab7 Final % ./client 127.0.0.1 4444
[*]Connection Accepted!
[*]Enter any string, type quit if you want to disconnect
printing from client 3
[*]Enter any string, type quit if you want to disconnect
[]

Lab7 Final — client 127.0.0.1 4444 — 113x8
(base) kunalkariwala@Lmaoo-1 Lab7 Final % ./client 127.0.0.1 4444
[*]Connection Accepted!
[*]Enter any string, type quit if you want to disconnect
hey I am the last client
[*]Enter any string, type quit if you want to disconnect
[]

Lab7 Final — -zsh — 113x11
(base) kunalkariwala@Lmaoo-1 Lab7 Final % ./client 127.0.0.1 4444
[*]Connection refused! Server is full
(base) kunalkariwala@Lmaoo-1 Lab7 Final %

```

Proof that clients can exit after typing the keyword “quit” and the server closes that thread. Once client 1 and client 2 send a quit message, client 6 and client 7 are able to connect.

```
Lab7 Final — script - server — 89x31
(base) kunalkariwala@Lmaoo-1 Lab7 Final % script
Script started, output file is typescript
Restored session: Wed Mar 30 20:58:29 IST 2022
(base) kunalkariwala@Lmaoo-1 Lab7 Final % gcc -o server ./server.c -lpthread
./server.c:58:1: warning: non-void function does not return a value [-Wreturn-type]
}
^
1 warning generated.
(base) kunalkariwala@Lmaoo-1 Lab7 Final % ./server 4444
[+]Server is active on [127.0.0.1: 4444]
[+]Connection accepted from 127.0.0.1:51280
[+]Connection accepted from 127.0.0.1:51281
[+]Connection accepted from 127.0.0.1:51282
[+]Connection accepted from 127.0.0.1:51283
[+]Connection accepted from 127.0.0.1:51284
[+]Client with ip:port as 127.0.0.1:51280 sent : printing from client 1
[+]Client with ip:port as 127.0.0.1:51281 sent : printing from client 2
[+]Client with ip:port as 127.0.0.1:51282 sent : printing from client 3
[+]Client with ip:port as 127.0.0.1:51281 sent : printing from client 2 again
[+]Client with ip:port as 127.0.0.1:51283 sent : printing from client 4
[+]Client with ip:port as 127.0.0.1:51284 sent : hey I am the last client
[+]Client with ip:port as 127.0.0.1:51280 has safely exited
[+]Client with ip:port as 127.0.0.1:51281 has safely exited
[+]Connection accepted from 127.0.0.1:51346
[+]Client with ip:port as 127.0.0.1:51346 sent : Nice to be accepted finally
[+]Client with ip:port as 127.0.0.1:51348 sent : Nice to be accepted finally too

Lab7 Final — script - zsh — 114x7
(base) kunalkariwala@Lmaoo-1 Lab7 Final % ./client 127.0.0.1 4444
[+]Connection Accepted!
[+]Enter any string, type quit if you want to disconnect
printing from client 1
[+]Enter any string, type quit if you want to disconnect
quit
(base) kunalkariwala@Lmaoo-1 Lab7 Final %

Lab7 Final — zsh — 113x8
[+]Connection Accepted!
[+]Enter any string, type quit if you want to disconnect
printing from client 2
[+]Enter any string, type quit if you want to disconnect
printing from client 2 again
[+]Enter any string, type quit if you want to disconnect
quit
(base) kunalkariwala@Lmaoo-1 Lab7 Final %

Lab7 Final — client 127.0.0.1 4444 — 113x11
(base) kunalkariwala@Lmaoo-1 Lab7 Final % ./client 127.0.0.1 4444
[+]Connection Accepted!
[+]Enter any string, type quit if you want to disconnect
printing from client 3
[+]Enter any string, type quit if you want to disconnect
quit

Lab7 Final — client 127.0.0.1 4444 — 89x8
(base) kunalkariwala@Lmaoo-1 Lab7 Final % ./client 127.0.0.1 4444
[+]Connection Accepted!
[+]Enter any string, type quit if you want to disconnect
printing from client 4
[+]Enter any string, type quit if you want to disconnect
quit

Lab7 Final — client 127.0.0.1 4444 — 113x8
(base) kunalkariwala@Lmaoo-1 Lab7 Final % ./client 127.0.0.1 4444
[+]Connection Accepted!
[+]Enter any string, type quit if you want to disconnect
hey I am the last client
[+]Enter any string, type quit if you want to disconnect
quit

Lab7 Final — client 127.0.0.1 4444 — 89x11
(base) kunalkariwala@Lmaoo-1 Lab7 Final % ./client 127.0.0.1 4444
[-]Connection refused! Server is full
(base) kunalkariwala@Lmaoo-1 Lab7 Final % ./client 127.0.0.1 4444
[-]Connection Accepted!
[+]Enter any string, type quit if you want to disconnect
Nice to be accepted finally
[+]Enter any string, type quit if you want to disconnect
quit

Lab7 Final — client 127.0.0.1 4444 — 113x11
(base) kunalkariwala@Lmaoo-1 Lab7 Final % ./client 127.0.0.1 4444
[-]Connection refused! Server is full
(base) kunalkariwala@Lmaoo-1 Lab7 Final % ./client 127.0.0.1 4444
[-]Connection Accepted!
[+]Enter any string, type quit if you want to disconnect
Nice to be accepted finally too
[+]Enter any string, type quit if you want to disconnect
quit
```