

## Client

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-bash
(base) Alexs-MacBook-Pro-2:assignment_1 alexwu$ gcc client.c -o client
(base) Alexs-MacBook-Pro-2:assignment_1 alexwu$ ./client localhost 1234

Sending packet no. 0 to localhost port 1234... (attempt 1 of 3)
Got an ack for packet no. 0.

Sending packet no. 1 to localhost port 1234... (attempt 1 of 3)
Got an ack for packet no. 1.

Sending packet no. 2 to localhost port 1234... (attempt 1 of 3)
Got an ack for packet no. 2.

Sending packet no. 3 to localhost port 1234... (attempt 1 of 3)
Got an ack for packet no. 3.

Sending packet no. 4 to localhost port 1234... (attempt 1 of 3)
Got an ack for packet no. 4.

Sending packet no. 0 to localhost port 1234... (attempt 1 of 3)
Got an ack for packet no. 0.

Sending packet no. 2 to localhost port 1234... (attempt 1 of 3)
Server: Error! Out of sequence (seg no.2)

Sending packet no. 1 to localhost port 1234... (attempt 1 of 3)
Got an ack for packet no. 1.

Sending packet no. 2 to localhost port 1234... (attempt 1 of 3)
Server: Error! Length mismatch (seg no.2)

Sending packet no. 2 to localhost port 1234... (attempt 1 of 3)
Got an ack for packet no. 2.

Sending packet no. 3 to localhost port 1234... (attempt 1 of 3)
Server: Error! End of packet missing (seg no.3)

Sending packet no. 3 to localhost port 1234... (attempt 1 of 3)
Got an ack for packet no. 3.

Sending packet no. 3 to localhost port 1234... (attempt 1 of 3)
Server: Error! Duplicate packet (seg no.3)

Sending packet no. 4 to localhost port 1234... (attempt 1 of 3)
Got an ack for packet no. 4.

(base) Alexs-MacBook-Pro-2:assignment_1 alexwu$
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## Server

```
server
(base) Alexs-MacBook-Pro-2:assignment_1 alexwu$ gcc server.c -o server
(base) Alexs-MacBook-Pro-2:assignment_1 alexwu$ ./server 1234

Server: Listening on port 1234...

Server: Message received: This is packet no. 0 from client. length: 255, seg_num: 0
Server: Sending ACK...

Server: Message received: This is packet no. 1 from client. length: 255, seg_num: 1
Server: Sending ACK...

Server: Message received: This is packet no. 2 from client. length: 255, seg_num: 2
Server: Sending ACK...

Server: Message received: This is packet no. 3 from client. length: 255, seg_num: 3
Server: Sending ACK...

Server: Message received: This is packet no. 4 from client. length: 255, seg_num: 4
Server: Sending ACK...

Server: Message received: This is packet no. 0 from client. length: 255, seg_num: 0
Server: Sending ACK...

Server: Message received: This is packet no. 1 from client. length: 255, seg_num: 2
Server: Error! Out of sequence.

Server: Message received: This is packet no. 1 from client. length: 255, seg_num: 1
Server: Sending ACK...

Server: Message received: This is packet no. 2 from client. length: 12, seg_num: 2
Server: Error! Length mismatch.

Server: Message received: This is packet no. 2 from client. length: 255, seg_num: 2
Server: Sending ACK...

Server: Message received: This is packet no. 3 from client. length: 255, seg_num: 3
Server: Error! End of packet missing.

Server: Message received: This is packet no. 3 from client. length: 255, seg_num: 3
Server: Sending ACK...

Server: Message received: This is packet no. 4 from client. length: 255, seg_num: 3
Server: Error! Duplicate packet.

Server: Message received: This is packet no. 4 from client. length: 255, seg_num: 4
Server: Sending ACK...

[]
```

## Time out

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-bash
(base) Alexs-MacBook-Pro-2:assignment_1 alexwu$ gcc client.c -o client
(base) Alexs-MacBook-Pro-2:assignment_1 alexwu$ ./client localhost 1234

Sending packet no. 0 to localhost port 1234... (attempt 1 of 3)
Server no response.
Sending packet no. 0 to localhost port 1234... (attempt 2 of 3)
Server no response.
Sending packet no. 0 to localhost port 1234... (attempt 3 of 3)
Server no response.

Server does not respond.
(base) Alexs-MacBook-Pro-2:assignment_1 alexwu$
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