

Networks Lab Week 4

Step 1: Result of compiling existing code

Server

```
petr_zaharkin@client:~/N_Labs/week4$ ./server
port number 53255
blocked on select System call...
New connection recieved recvd, accept the connection. Client and Server completes TCP-3 way handshake at this point
Connection accepted from client : 127.0.0.1:60166
Server ready to service client msgs.
Server recvd 8 bytes from client 127.0.0.1:60166
Server sent 4 bytes in reply to client
Server ready to service client msgs.
```

Client

```
petr_zaharkin@client:~/N_Labs/week4$ ./client
Enter a : ?
10
Enter b : ?
15
No of bytes sent = 8
No of bytes received = 4
Result received = 25
Enter a : ?
```

Step 2: Changing code to send strings and other data

Server

```
petr_zaharkin@client:~/N_Labs/week4$ ./server
port number 53255
blocked on select System call...
New connection recieved recvd, accept the connection. Client and Server completes TCP-3 way handshake at this point
Connection accepted from client : 127.0.0.1:57122
Server ready to service client msgs.
Server recvd 68 bytes from client 127.0.0.1:57122
Server sent 128 bytes in reply to client
Server ready to service client msgs.
```

Client

```
petr_zaharkin@client:~/N_Labs/week4$ ./client
Enter student name : Peter
Enter student age : 19
Enter student group name: BS17-06
No of bytes sent = 68
No of bytes received = 128
Result received = {Peter, 19, BS17-06}
```

Step 3: Running on different machines, connected by router

Ping

```
petr_zaharkin@client:~/N_Labs/week4$ ping 192.168.1.2
PING 192.168.1.2 (192.168.1.2) 56(84) bytes of data.
64 bytes from 192.168.1.2: icmp_seq=1 ttl=63 time=1.95 ms
64 bytes from 192.168.1.2: icmp_seq=2 ttl=63 time=0.615 ms
64 bytes from 192.168.1.2: icmp_seq=3 ttl=63 time=0.647 ms
64 bytes from 192.168.1.2: icmp_seq=4 ttl=63 time=0.797 ms
^C
--- 192.168.1.2 ping statistics ---
4 packets transmitted, 4 received, 0% packet loss, time 3006ms
```

Server

```
petr_zaharkin@server:~/N_Labs/week4$ ./server
port number 53255
blocked on select System call...
New connection recieved recvd, accept the connection. Client and Server completes TCP-3 way handshake at this point
Connection accepted from client : 192.168.4.2:56444
Server ready to service client msgs.
Server recvd 68 bytes from client 192.168.4.2:56444
Server sent 128 bytes in reply to client
Server ready to service client msgs.
```

Client

```
petr_zaharkin@client:~/N_Labs/week4$ ./client
Enter student name : John
Enter studen age : 24
Enter student group name: BS13_37
No of bytes sent = 68
No of bytes received = 128
Result received = {John, 24, BS13_37}
```