1.

YouTube uses TCP as IPv4 protocol for video streaming. Normally, UDP is more suitable for video streaming. However, YouTube uses TCP for video streaming because it provides some useful features such as transmit pacing, duplicate rejection, slow start etc.

2.

My IP: 144.122.192.199

YouTube IP: 172.217.169.214

ceng.metu.edu.tr IP: 144.122.145.146

3.

Source port: 62253

Destination port: 80

4.

Number	Seq number	Ack number
11209	0	0
11211	0	1
11212	1	1

5.

Number	Seq number	Segment Length
11242	1	1460
11243	1461	1460
11245	2921	1460
11246	4381	1460
11247	5841	1460

6.

In the first ACK from the server, it is seen that minimum amount of available buffer space is 29200 bytes. The sender is never throttled because of the lack of receiver buffer space.