**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.