1. Youtube uses TCP protocol for their video streaming service. Since Youtube is not live streaming the videos and data sent to clients needs to be reliable TCP is needed. TCP makes sure no data is loss in the video and videos preloads for the clients.

2. ceng.metu.edu.tr : 144.122.171.44
   My computer : 192.168.0.14 (local address before NAT)
   youtube: 216.58.207.46

3.

GET REQUEST	**SOURCE PORT**	**DESTINATION PORT**
GET /~hbostan/ceng435 HTTP/1.1\r\n	56281	80
GET /~hbostan/ceng435 HTTP/1.1\r\n	56282	80
GET /~hbostan/ceng435/ HTTP/1.1\r\n	56282	80
GET /~hbostan/ceng435/images/ceng.png HTTP/1.1\r\n	56282	80
GET /~hbostan/ceng435/images/odtuclass.png HTTP/1.1\r\n	56283	80
GET /favicon.ico HTTP/1.1\r\n	56283	80

4. No 19827: Source= 192.168.0.14 Destination= 144.122.171.44 Flags=SYN Seq=0
   No 19829: Source= 144.122.171.44 Destination = 192.168.0.14 Flags=SYN,ACK Seq=0 Ack=1
   No 19830: Source= 192.168.0.14 Destination= 144.122.171.44 Flags=ACK Seq=1 Ack=1

5. No 19856: Seq=4813
   No 19857: Seq=6273
   No 19860: Seq=7733
   No 19861: Seq=9193
   No 19862: Seq=10653
   [TCP Segment Len: 1460]

6. Minimum advertised window by receiver(192.168.0.14) is 62972 at packet no 19847 . Advertised amount seems like always bigger than sender's window size. While advertised window size varies between 62000-65000, Sender's window size varies between 30000-33000. There is no throttle happening for lack of buffer size.