# Lab 7-D NAT

Name – Sati, Ankit Date – 9/30/2021

Section - 001

Total in points (Maximum 100 points)–

Professors Comments –

Affirmation of Independent Effort – Ankit Sati

Answers are provided on the basis of the file in the given zip folder.

1. IP address of my computer is 10.0.0.221
2. The main google server based on the given IP address:

Graphical user interface, text

Description automatically generated

1. Graphical user interface, text, application, Word

   Description automatically generatedThe source is 71.192.34.104 with source port 4335 and the destination is 64.233.169.104 with port 80.
2. For the datagram carrying the OK message, the source is 64.233.169.104 with port 80 and the destination is 71.192.34.104 with port 4335.
3. For the IP datagram with the TCP SYN segment, the source is 71.192.34.104 with source port 4335 and the destination is 64.233.169.104 with port 80.

For the IP datagram with the ACK segment sent in response, the source is 64.233.169.104 with port 80 and the destination is 71.192.34.104 with port 4335.

1. For the HTTP GET datagram, the source is 71.192.34.104 with source port 4335 and the destination is 64.233.169.104 with port 80. Every field apart from the source IP address remains the same.
2. No fields in the HTTP GET message have changed.

Only the value of the checksum field in the IP datagram changes. Since the source address changes, a new checksum will be generated to correspond with the new source address.

1. The first 200 OK message is received at 16:43:07.

The source is 64.233.169.104 with port 80 and the destination is 71.192.34.104 with port 4335. All fields except the destination IP address are the same.

1. The TCP SYN segment was captured at 16:43:07.766 and the TCP ACK segment was captured at 16:43:07.799.

For the TCP SYN segment:

The source is 71.192.34.104 with port 4335 and the destination is 64.233.169.104 with port 80.

For the TCP ACK segment:

The source is 64.233.169.104 with port 80 and the destination is 71.192.34.104 with port 4335.

The source and destination addresses are reversed in both segments