

Name : Devansh Srivastava

Registration number : 21BCE0527

Network Training Programme

Module 6

Q4. You are given three IP addresses: 192.168.10.5, 172.20.15.1, and 8.8.8.8. Identify the class of each IP address. Determine if it is private or public.

**192.168.10.5:**

First octet: 192 (11000000 in binary)

Class: Class C (first bits: 110)

Private or Public: Private (falls within 192.168.0.0 - 192.168.255.255 range)

**172.20.15.1:**

First octet: 172 (10101100 in binary)

Class: Class B (first bits: 10)

Private or Public: Private (falls within 172.16.0.0 - 172.31.255.255 range)

**8.8.8.8:**

First octet: 8 (00001000 in binary)

Class: Class A (first bit: 0)

Private or Public: Public (not in private ranges 10.0.0.0/8, 172.16.0.0/12, or 192.168.0.0/16)

Note: This is Google's public DNS server