# Assignment for 26/4/2024 attendance

# Name: Aromal Kunnel R.No: 22BAI10288

➢ What is size of IPV4 and IPV6?

The size of IPv4 and IPv6 addresses is significantly different, reflecting a major advantage of IPv6: its vastly larger address space.

IPv4: Uses a 32-bit address length. This translates to $2^{32}$ possible unique addresses, which is roughly 4.3 billion.

IPv6: Employs a 128-bit address length. This offers a much larger address space with $2^{128}$ possible unique addresses, a number so vast it's expressed as an astronomical term: 340 undecillion.

Due to the exhaustion of IPv4 addresses, IPv6 is crucial for accommodating the ever-growing number of internet-connected devices.