

IPv4 Addressing Approaches:

$$\begin{array}{ccccccc}
 \underline{192} & \cdot & \underline{128} & \cdot & \underline{168} & \cdot & \underline{3} \\
 \underline{B} & & \underline{B} & & \underline{B} & & \underline{B} \\
 \hline
 8\text{bits} & & & & & & \\
 2^8 & \cdot & 2^8 & \cdot & 2^8 & \cdot & 2^8
 \end{array}
 \rightarrow \text{DOT DECIMAL NOTATION. (Denary)}$$

= 4Bytes
= 32bits

$$\begin{array}{ccccccc}
 & & & & 233 & \cdot & 23 & \cdot & 45 & \cdot & 6 \\
 \hline
 11101110 & \cdot & 00010111 & \cdot & 10011100 & \cdot & 0000110
 \end{array}$$

Octet Octet

Total number of IP addresses = 2^{32} = 4Billion Approx.

Keywords: IP address, Internet Protocol,
IPv4, IPv6, Format of IPv4 & IPv6,
Types of IP addresses.

$$\text{Byte} = 8\text{bits} = 2^8 = 256 \begin{array}{l} \text{---} 0 \\ \text{---} 255 \end{array}$$