IP (internet protocol)

IP two types- 1. Public IP, 2. Private IP – Class A (10.0.0.0), class B (172.16.X.X to 172.31.X.X), Class C (192.168.0.0 to 192.168.255.255)

IP – 32bit logical address or 4 octet. It means each octet 8bit.

IP address = network id + host id

IP address types of class

1. Class A – 1.0.0.0 to 126.0.0.0
2. Class B - 128.0.0.0 to 191.255.0.0
3. Class C - 192.0.0.0 to 223.255.255.0
4. Class D- 224-239 (multicast or special purpose)
5. Class E - 240-255 ( research purpose)
6. 127.0.0.0 (loop back address reserve )

How to find network id?

Class A – first octet reserve for network and remaining octet for host (N-H-H-H). so class A network ID (N-0-0-0)

Example- 95.10.10.20 find out network id?

Class B – first two octet reserve for network and remaining octet for host (N-N-H-H) so class B network ID (N-N-0-0)

Example- 145.45.20.187 find out network id?

Class C – first three octet reserve for network and remaining octet for host (N-N-N-H) so class C network ID (N-N-N-0)

Example- 198.10.20.45 find out network id?

Example – 140.10.50.30 find out network id & broadcast id & host

Network id – 140.10.0.0

Broadcast id -140.10.255.255

Host – 2^16-5=65531

5 IP reserve here in aws

First ip for network id

Second ip for router

Third ip for DNS

Fourth ip for future purpose

Last ip for broadcast message

Subnet mask -10.10.10.10 find out subnet mask?

255.0.0.0

Subnet mask of 160.10.10.10?

255.255.0.0

Subnet mask of 198.20.20.20?

255.255.255.0

C.I.D.R (classless Inter Domain Routing)

Class A- 15.125.10.123/8 (here 8 means bydefault given to network)

15.125.10.123/11 its mean 3 bit given to network