**Date:** 8th Feb 2017

**Reg. No.:** 14BIT004

**Experiment No:** 1.c

**Question:** Study of Network IP

* Classification of IP address
* Sub netting
* Super netting

**SUB NETTING:**

A subnetwork or subnet is a logical subdivision of an IP network. The practice of dividing a network into two or more networks is called subnetting. Computers that belong to a subnet are addressed with a common, identical, most-significant bit-group in their IP address.

**SUPER NETTING:**

A supernetwork, or supernet, is an Internet Protocol (IP) network that is formed, for routing purposes, from the combination of two or more networks (or subnets) into a larger network. The new routing prefix for the combined network represents the constituent networks in a single route table entry.

**DIFFERENT IP ADDRESS CLASSES:**

|  |  |  |
| --- | --- | --- |
| **Class** | **Address Range** | **Supports** |
| **Class A** | 1.0.0.1 to 126.255.255.254 | Supports 16 million hosts on each of 127 networks. |
| **Class B** | 128.1.0.1 to 191.255.255.254 | Supports 65,000 hosts on each of 16,000 networks. |
| **Class C** | 192.0.1.1 to 223.255.254.254 | Supports 254 hosts on each of 2 million networks. |
| **Class D** | 224.0.0.0 to 239.255.255.255 | Reserved for multicast groups. |
| **Class E** | 240.0.0.0 to 254.255.255.254 | Reserved. |