LAB REPORT NO # 09

INTRODUCTION TO NETWORING

Networking is the practice of linking of two or more computing devices for data sharing data.

IP (INTERNET PROTOCOL)

IP address is a numerical label assigned to each device in a network. An IP address serves two functions; host and network interface identification and location addressing.

IP address is a 32-bit number and this system is known as internet protocol version 4 (IPv4). A new version of 128-bit is also created known as internet protocol version 6 (IPv6).

IPv4 address in dotted-decimal notion 172.16.254.4

IP version 4 has four classes A, B, C, and D

- ***CLASS A***

It range from 0-127 it consist of 8 network bits and 24 host bits.

- ***CLASS B***

It range from 128-191 and consist of 16 network bits and 16 host bits.

- **CLASS C**

It range from 192-223 and consist of 24 network bits and 8 host bits.

- ***CLASS D***

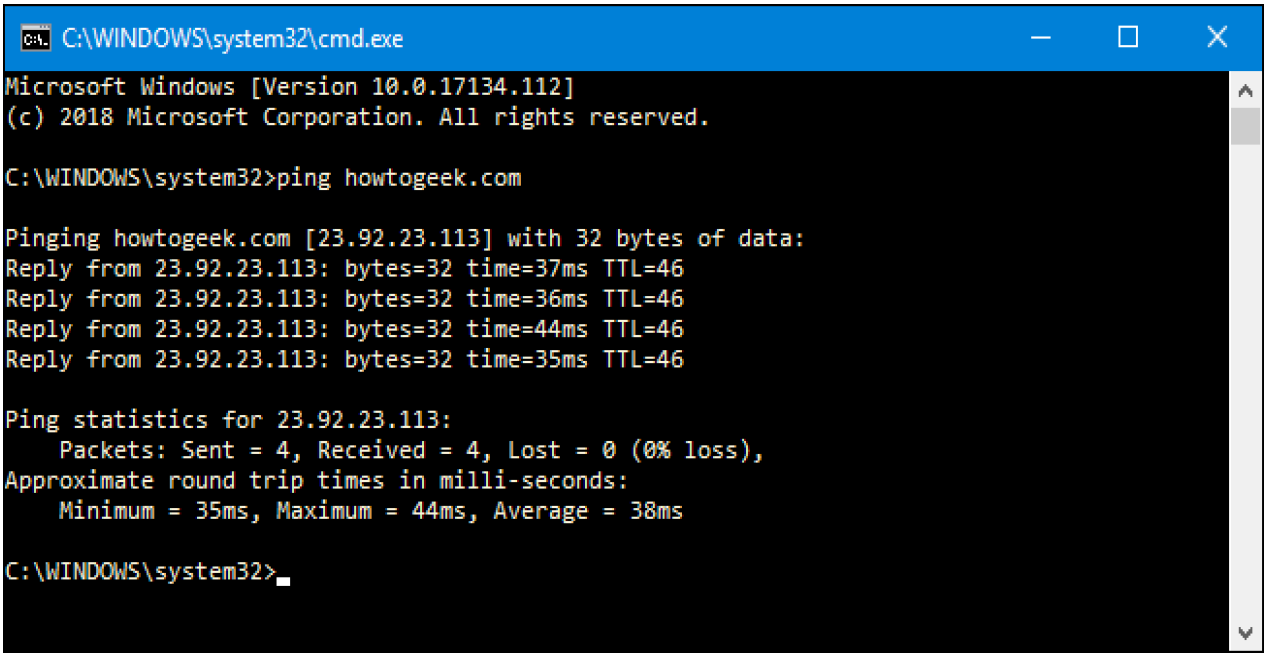
It range from 224-239

- ***CLASS E***

It range from 240-255

PING

It is a computer network administration software utility used to test the reachability of host on an internet protocol network.



PHYSICAL ADDRESS

In computing a physical address is a memory address that is represented in the form of a binary numbers on the address bus circuitry in order to enable the data bus to access a particular storage cell of main memory or a register of memory mapped I/O device.

Wi-Fi (wireless fidelity)

Wi fi is a wireless connection which uses radio signals for transmission. It consists of three essential elements that are radio signals, antenna and router. It is not a much secure network.

SECURITY

Networking security consists of the *policies* and practices adopted to prevent and monitor *unauthorized* access, *misuse*, modification, or denial of a *computer network* and network-accessible resources. Network security involves the authorization of access to data in a network, which is controlled by the network administrator. Users choose or are assigned an ID and password or other authenticating information that allows them access to information and programs within their authority.

ENCRYPTION

E*ncryption* is the process of encoding a message or information in such a way that only authorized parties can access it and those who are not authorized cannot. Encryption does not itself prevent interference but denies the intelligible content to a would-be interceptor