#### **Network Commands**

# 1) ping

The ping command (named after the sound of an active sonar system) sends echo requests to the host specified on the command line, and lists the responses received.

Syntax: ping ipAddress or hostname

e.g

#### ping www.vit.ac.in

- ping sends an ICMP *ECHO\_REQUEST* packet to the specified host. If the host responds, an ICMP packet is received.
- One can "ping" an IP address to see if a machine is alive.
- It provides a very quick way to see if a machine is up and connected to the network.

#### 2) netstat

• It works with the LINUX Network Subsystem, it will tell us what the status of ports are ie. open, closed, waiting connections. It is used to display the TCP/IP network protocol statistics and information.

# e.g **netstat netstat -a**

# 3) tcpdump

This is a sniffer, a program that captures packets off a network interface and interprets them.

### 3) hostname

Tells the user the host name of the computer they are logged into.

#### e.g hostname

#### 4) traceroute (In Windows use tracert)

traceroute will show the route of a packet. It attempts to list the series of hosts through which our packets travel on their way to a given destination.

Command syntax: traceroute machineName or ip

#### e.g traceroute www.vit.ac.in

Each host will be displayed, along with the response times at each host.

#### 5) finger

Retrieves information about the specified user.

# e.g finger bce8001

### 6) if config (In Windows use ipconfig)

This command is used to configure network interfaces, or to display their current configuration.

#### e.g /sbin/ifconfig

# /sbin/ifconfig -a

# 7) dig

The "domain information groper" tool. If a hostname is given as an argument, it outputs information about that host, including it's IP address, hostname and various other information.

# e.g dig vitlinux

#### 8) telnet

telnet allows you to log in to a computer, just as if you were sitting at the terminal. Once your username and password are verified, you are given a shell prompt. From here, you can do anything requiring a text console.

#### e.g telnet bce8001

# 9) ftp

To connect to an FTP server.

Syntax: ftp ipaddress

#### e.g **ftp 192.168.0.15**

10) nslookup nslookup returns the ipaddress of the given hostname and vice versa.

# e.g nslookup www.vit.ac.in

# nslookpup www.google.com