Experiment No:1

Aim: study linux commands

Theory:

ifconfig

ifconfig is used to configure the system's kernel-resident network interfaces. It is used at boot time to set up interfaces as necessary. After that, it is usually only needed when debugging or when system tuning is needed. If no arguments are given, ifconfig displays the status of the system's active interfaces. If a single interface argument is given, it displays the status of the given interface only.

Eg: ifconfig

Running ifconfig with no options will display the configuration of all active interfaces.

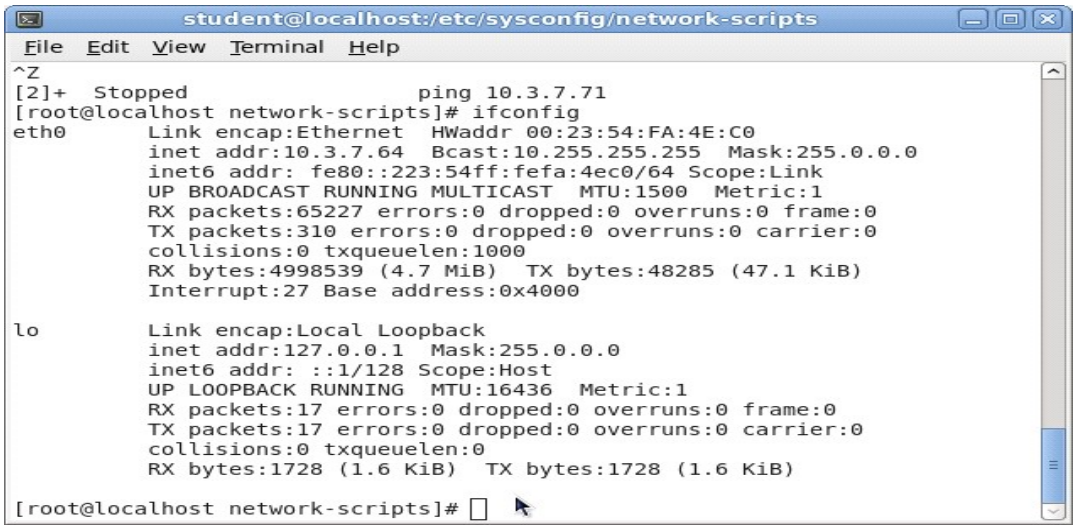

Figure 1: ifconfig Command

ping

ping is a simple way to send network data to, and receive network data from, another computer on a network. It is frequently used to test, at the most basic level, whether another system is reachable over a network, and if so, how much time it takes for that data to be exchanged.

Eg: ping google.com

Ping the host google.com to see if it is alive.

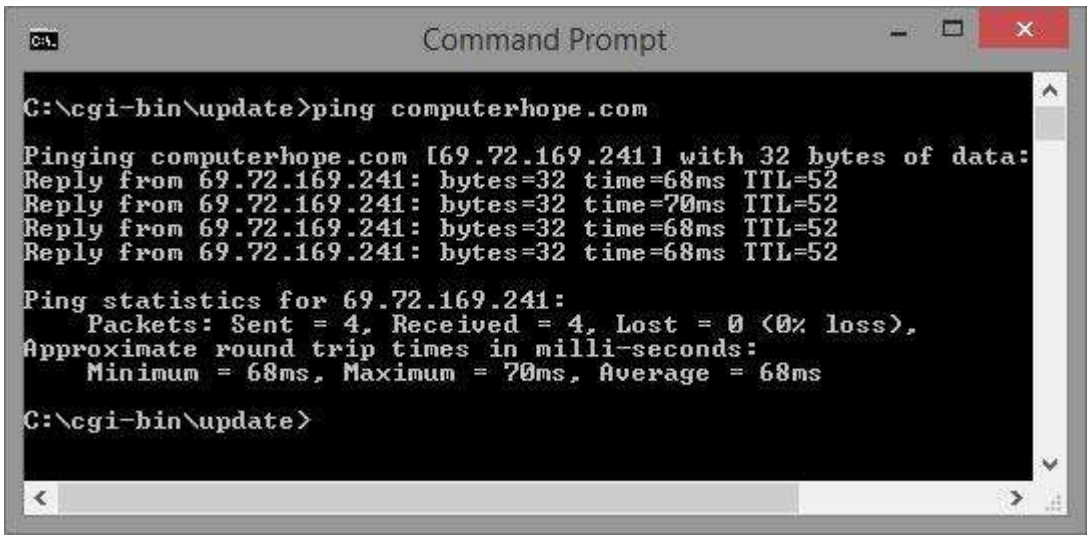

Figure 2: ping Command

3. tracepath

www.vesit.edu : It traces the complete path to a networking host discovering the MTU along the path.

It uses UDP port or some random port. It is similar to traceroute, only it does not require superuser privileges and has no fancy options.

Syntax: tracepath destination [port]

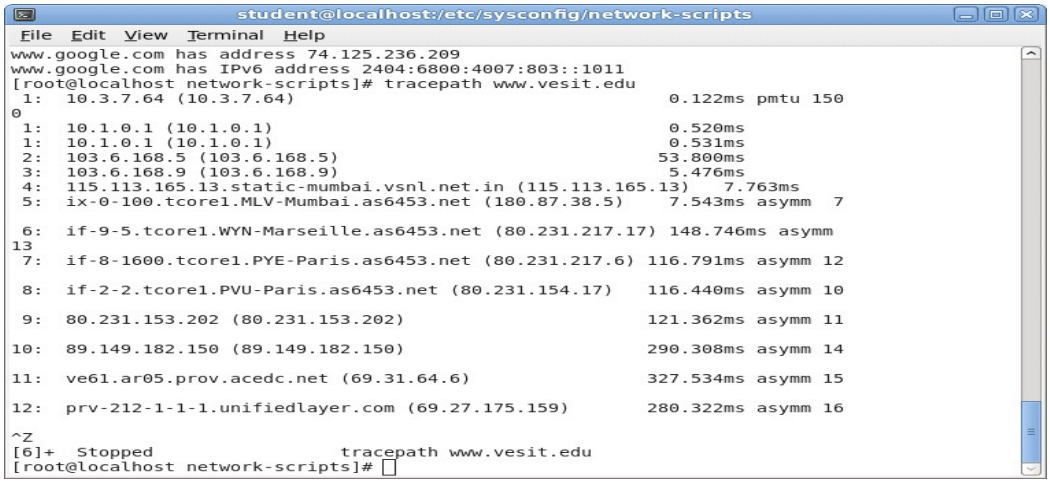

Figure 3: tracepath Command

4. traceroute

www.vesit.edu: traceroute prints the route that packets take to a network host. It is used to find network path from machine to server.

The server name above is destination name or IP address.

Syntax: traceroute <server name>

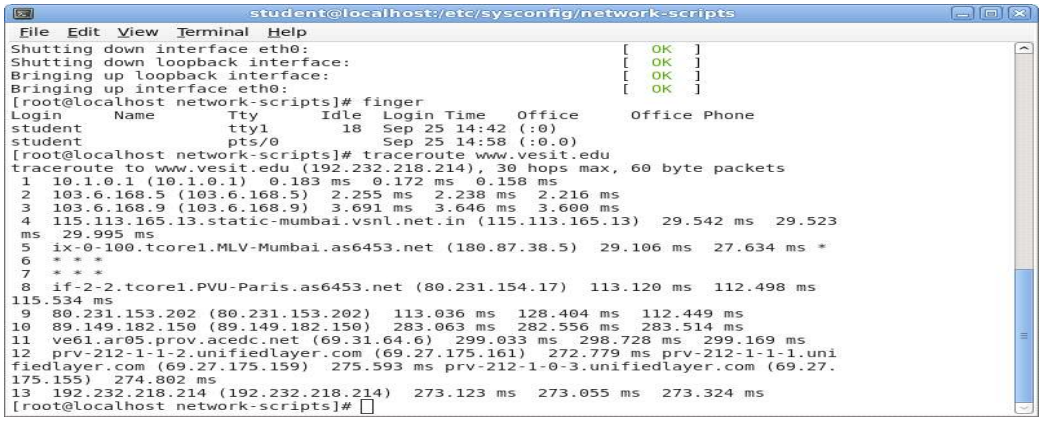

Figure 4: traceroute Command

5. host

www.google.com host is a simple utility for performing DNS lookups.
It is normally used to convert names to IP addresses and vice versa. When no arguments or options are given, host prints a short summary of its command line arguments and options.

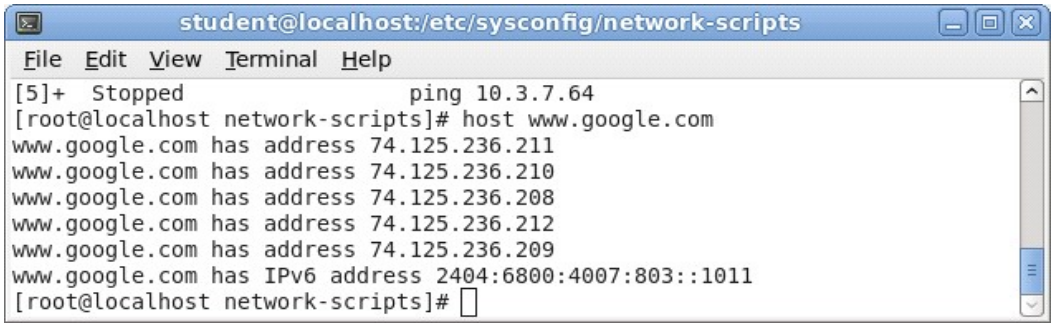

Figure 5: host Command

6. Service Network Restart

Service runs a System V init script or upstart job in as predictable an environment as possible, removing most environment variables and with current working directory set to "/.

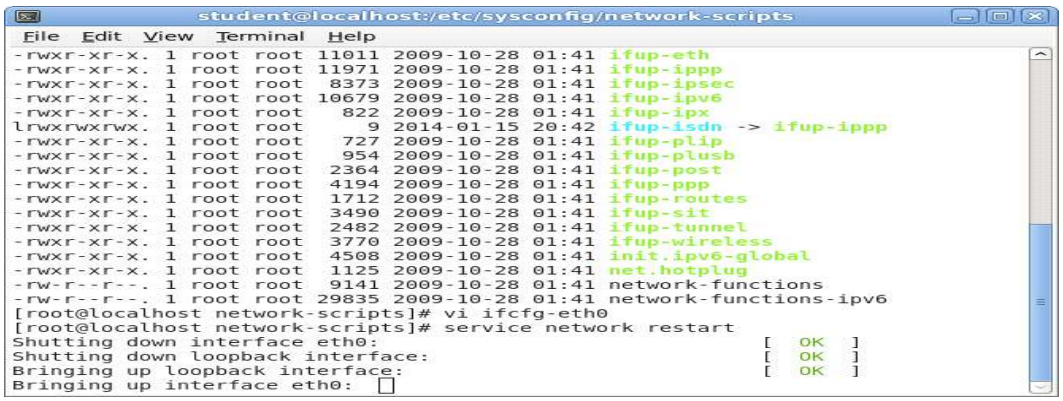

Figure 6: Service Network Restart Command

7. finger

Finger looks up and displays information about system users.

Syntax: finger [-lmsp] [user...] [userhost...]

Eg: finger –p ch

Display information about the user ch

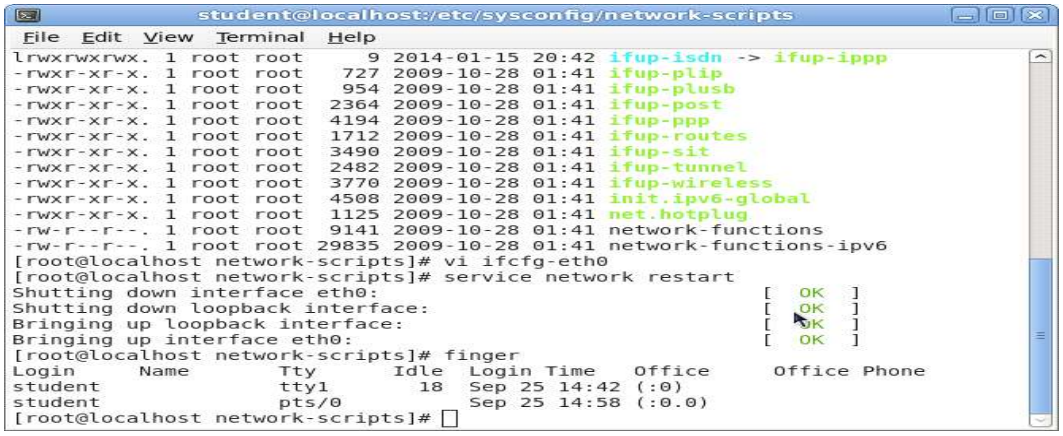

Figure 7: finger Command

8. netstat

The netstat command is used to print network connections, routing tables, interfacestatistics, masquerade connections, and multicast memberships. It is used for finding problems in the network and to determine the amount of traffic on the network as a performance measurement.

Eg: netstat –an

Shows information about all active connections to the server, including the source and destination IP addresses and ports, if you have proper permissions.

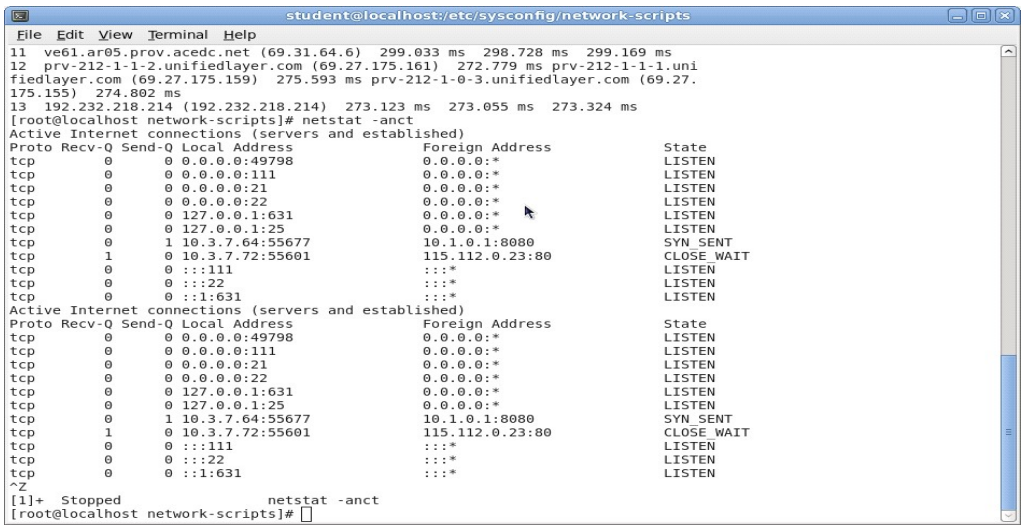

Figure 8: netstat Command

Conclusion: Hence successfully studied the commands of linux.

Date:

Sign: **Grade:**