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**Assignment No. 1**

Execute the following commands at your system and paste the screen shot:

1. **Command Prompt:**

It takes input command from user in a text-based user interface. > sign is used as a separator and before that you have path of working directory. E.g:

1. **ping [specific address e.g. google.com]**

**Command:**

**C:\Users\Kashif>ping google.com**

Note: Sometimes ping command shows IPv6 address by default, so to show IPv4 address you need to type -4 at the end of ping command as shown above.

1. **ping [IP Address]** //We can ping with IP address directly

**Command:**

**C:\Users\Kashif>ping 142.250.181.174**

1. **ping -t [specific address]** // for continuous ping until stopped with ctrl^c

// for 5 pings, ping -n 5 google.com

**Command:**

**C:\Users\Kashif>ping -t google.com**

//-n 5 for 5 pings

1. **ping -l [Pkt Size in Bytes] [specific address]** // for change pkt size from default 32 to 200 upto 65500

**Command:**

**C:\Users\Kashif> ping -l 200 google.com**

1. **ping -i [TTL in number] [specific address]** //-i 2 for setting TTL=2, 8.8.8.8 public DNS server

**Command:**

**C:\Users\Kashif> ping -i 2 8.8.8.8**

1. **ping 127.0.0.1** //for loopback testing

**Command:**

**C:\Users\Kashif> ping 127.0.0.1**

**Explanation:**

The address 127.0.0.1 is reserved for loopback testing. If the ping is successful, then TCP/IP is properly installed and functioning on this computer. Packets sent to this address never reach the network but are looped through the network interface card only. This can be used for diagnostic purposes to verify that the internal path through the TCP/IP protocols is working.

**Network Trace Route Command**

1. **tracert [specific address or IP]**

**Command:**

**C:\Users\Kashif> tracert 8.8.8.8**

1. **tracert -h [max\_hops] [specific address or IP] //Max. number of hops to search for target.**

**Command:**

**C:\Users\Kashif> tracert -h 4 8.8.8.8**

**Activity-2(Students will do their self):**

**Find the equivalent of all above commands in linux and execute. Also paste the screen shots of the outputs.**