Assignment 1

CS 342: Networks Lab

Q1.

1. -c followed by the time interval in seconds.

Example, $ ping -c 2 facebook.com

1. -i followed by the time interval in seconds.

Example, $ ping -i 2 facebook.com

1. .
2. .

Q2.

1. .
2. .
3. .
4. .

Q3.

1. .
2. .
3. .
4. .

Q4.

1. ifconfig command is used to configure network interfaces. If no arguments are given it displays currently active network interfaces. Ifconfig stands for “interface configuration”.
2. The leftmost term gives the names of the active network interfaces.
3. Link encap states the frame type associated with the interface which is responsible for the correct rulemaking and successful transmission of data packets.
4. HWaddres (Hardware address) also known as MAC address. It is the global unique identifier for a network interface.
5. inet addr gives the IPv4 address assigned to the interface.
6. Bcast gives the Broadcast address of the network and Mask specifies the network mask.
7. Line number 4 and 5 specify the details of the packets transmitted and received respectively via the interface.

<https://www.computerhope.com/unix/uifconfi.htm>

<http://blmrgnn.blogspot.com/2014/01/linux-ifconfig-command-output-explained.html>

1. .
2. -a : Display all the available network interfaces even if they are down.
3. up/down : Causes an interface to be activated or deactivated respectively. Syntax:

$ ifconfig <interface> up/down

1. [-]arp: Enable or disable ARP protocol on an interface. Syntax:

$ ifconfig <interface> arp (to enable)

$ ifconfig <interface> -arp (to disable)

1. -v : Be more verbose or display additional information on errors.
2. route command is used to display and manipulate IP routing table.
3. Destination:
4. Gateway:
5. Genmask:
6. Flags:
7. Metric:
8. Ref:
9. Use:
10. Iface:
11. .
12. -n:
13. -e:
14. add:
15. -host:

Q5.

1. The netstat command is used to display the network statistics as is suggested by the name.
2. $ netstat Proto tcp
3. $ netstat -interface
4. .
5. .
6. .

Q6.

1. .
2. .
3. .
4. .
5. .

Q7.

1. .
2. .
3. .
4. .

Q8.

1. .
2. .
3. .