CYSE-270- Linux System For Cybersecurity

Assignment –10

Networking Basics - Subnetting (100 points)

Understanding subnetting takes time and practice. Using the methods covered during the class, fill in the following tables for Network, broadcast, first IP, Last IP and Max. Hosts in the network.

The column for IP address should be in Decimal format for each, except number of hosts. (Refer to the examples in the slide for week 10-Networking Basics)

Category	IP Address	Binary Format
Address	192.168.100.4	11000000101010000110010000000100
Netmask	28	11111111.1111111.1111111.11110000
Network address	192.168.100.0	11000000.10101000.011001000.00000000
Broadcast address	192.168.100.15	11000000.10101000.011001000.00001111
First IP	192.168.100.1	11000000.10101000.011001000.00000001
Last IP	192.168.100.14	11000000.10101000.011001000.00001111
Maximum host in the network	14	

Task-A: (50 Points)

Task-B: (50 points)

Category	IP Address	Binary Format
Address	170.1.0.0	101010100000001000000000000000000000000
Netmask	26	111111111111111111111111111111111111111
Network address	170.1.0.0	10101010.0000001.0000000.00000000
Broadcast address	170.1.0.63	10101010.0000001.0000000.00111111
First IP	170.1.0.1	10101010.0000001.0000000.00000001
Last IP	170.1.0.62	10101010.0000001.0000000.00111110

Maximum host in the	62	
network		

Extra Credit (10 points)

Write a bash script to print out 0~10 in shell scripts by using for loop and while loop, respectively? Please submit the screenshot for the script and its output, both.

Extra credit

Input



Output:

\$./sahmer45.sh	
Printing numbers from 0 to	o 10 using while loop:
0	
1	
2	
3	المالكات كالكالم
4 Home	"the quieter you become.
5	
6	
7	
8	
9	
10	