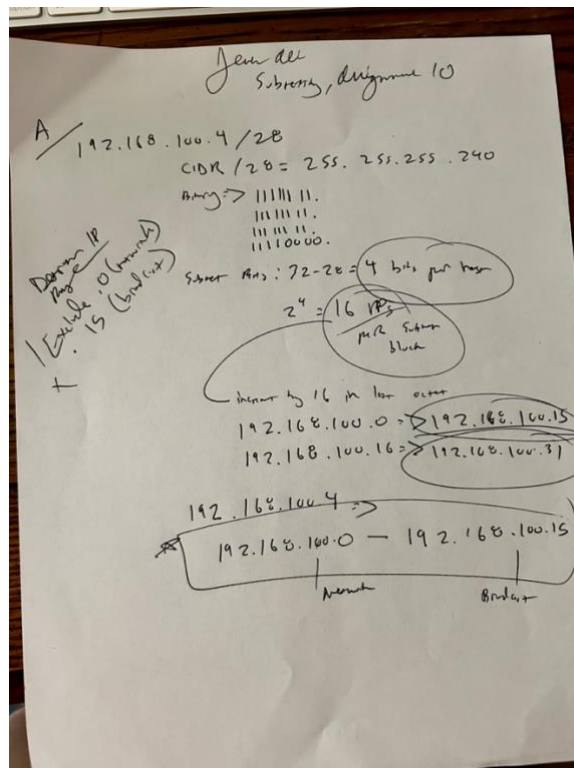


Assignment –10 Networking Basics – Subnetting

Completed assignment while referring to examples in slides for week 10 Networking Basics

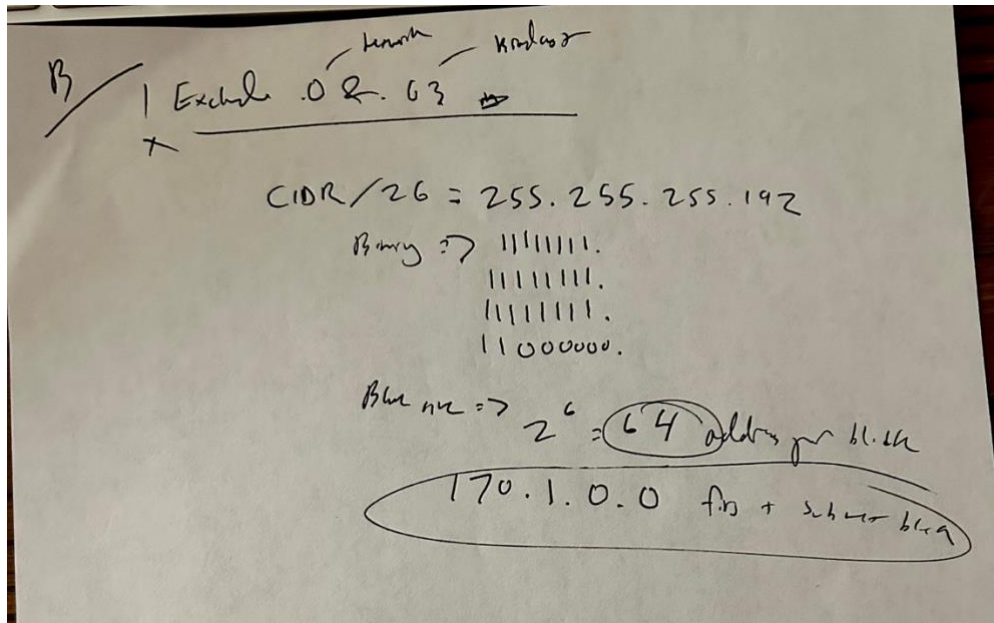
Task A:

Category	IP Address	Binary Format
Address	192.168.100.4	11000000 10101000 01100100 00000100
Netmask	28	11111111 11111111 11111111 11110000
Network address	192.168.100.0	11000000 10101000 01100100 00000000
Broadcast address	192.168.100.15	11000000 10101000 01100100 00001111
First IP	192.168.100.1	11000000 10101000 01100100 00000001
Last IP	192.168.100.14	11000000 10101000 01100100 00001110
Maximum host in the network	14	



Task B:

Category	IP Address	Binary Format
Address	170.1.0.0	10101010 00000001 00000000 00000000
Netmask	26	11111111 11111111 11111111 11000000
Network address	170.1.0.0	10101010 00000001 00000000 00000000
Broadcast address	170.1.0.63	10101010 00000001 00000000 00111111
First IP	170.1.0.1	10101010 00000001 00000000 00000001
Last IP	170.1.0.62	10101010 00000001 00000000 00111110
Maximum host in the network	62	

**Extra Credit Found on Next Page**

Extra Credit : Wrote a bash script to print out 0~10 in shell scripts by using for loop and while loop respectively.

```
File Actions Edit View Help
GNU nano 8.2
#!/bin/bash

echo "Using for loop:"
for i in {0..10}; do
    echo $i
done

echo "Using while loop:"
i=0
while [ $i -le 10 ]; do
    echo $i
    ((i++))
done
```

```
File Actions Edit View Help
(kali@kali)-[~]
$ nano ex1

(kali@kali)-[~]
$ chmod +x ex1

(kali@kali)-[~]
$ ./ex1
Using for loop:
0
1
2
3
4
5
6
7
8
9
10
Using while loop:
0
1
2
3
4
5
6
7
8
9
10
```