

Kowalski Networking Basics - Subnetting (100 points)

TASK A

Category	IP Address	Binary Format
Address	192.168.100.4	11000000.10101000.0110010 0.00000100
Netmask	255.255.255.240	11111111.11111111.11111111.1 1110000
Network address	192.168.100.0	11000000.10101000.0110010 0.00000000
Broadcast address	192.168.100.15	11000000.10101000.0110010 0.00001111
First IP	192.168.100.1	11000000.10101000.0110010 0.00000001
Last IP	192.168.100.14	11000000.10101000.0110010 0.00001110
Maximum host in the network	14	n/a

TASK B

Category	IP Address	Binary Format
Address	170.1.0.0	10101010.00000001.000000 00.00000000
Netmask	26	11111111.11111111.11111111.1 1000000
Network address	170.1.0.0	10101010.00000001.000000 00.00000000
Broadcast address	170.1.0.63	10101010.00000001.000000 00.00111111
First IP	170.1.0.1	10101010.00000001.000000 00.00000001
Last IP	170.1.0.62	10101010.00000001.000000 00.00111110

Maximum host in the network	62	
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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.

Vm won't load, script below:

```
#!/bin/bash
for i in {0..10}
do
    echo $i
done
```

```
#!/bin/bash
i=0
while [ $i -le 10 ]
do
    echo $i
    ((i++))
done
```