Network simulation

TREE

1st Ip-> 193.168.1.0

Building A: 212 hosts

Awl network

1-Subnet mask: 255.255.255.0

2- Network Ip: 193.168.1.0

3- Broadcast Ip: 2^8+0-1 = 193.168.1.255

4- First valid: 193.168.1.2

5- Last valid: 193.168.1.254

6- Default gateway: 193.168.1.1 (ROUTER)

Wildcard mask:

255.255.255.255 - 255.255.255.0

=> 0.0.0.255

10.10.10.100

255.0.0.0

IPS : 11 switch 10 mnhom 7y4elo 20 w l a5er 7y4el 12 bs .

BUS

Building B: 36 hosts -

Ip: 193.168.2.0

1-Subnet mask: 255.255.255.192

2- Network Ip: 193.168.2.0

3- Broadcast Ip: 2^6+0 - 1 = 193.168.1.63

4- First valid: 193.168.2.2

5- Last valid: 193.168.2.62

6- Default gateway: 193.168.2.1 (ROUTER)

4 \* 9 = 36

WildCard mask:  
0.0.0.63

Star

Building C: 47 hosts

1-Subnet mask: 255.255.255.192

2- Network Ip: 193.168.2.64

3- Broadcast Ip: 2^6+ 64 - 1 = 193.168.1.127

4- First valid: 193.168.2.66

5- Last valid: 193.168.2.126

6- Default gateway: 193.168.2.65 (ROUTER)

9+9+9+9+11

WildCard mask:  
0.0.0.63

Ring

Building D: 125 hosts

1-Subnet mask: 255.255.255.128

2- Network Ip: 193.168.2.128

3- Broadcast Ip: 2^7+ 128 - 1 = 193.168.1.255

4- First valid: 193.168.2.130

5- Last valid: 193.168.2.254

6- Default gateway: 193.168.2.129 (ROUTER)

25 \* 5

WildCard mask:  
0.0.0.127

Building E: 80 hosts

1-Subnet mask: 255.255.255.128

2- Network Ip: 193.168.3.0

3- Broadcast Ip: 2^7+ 0 - 1 = 193.168.1.127

4- First valid: 193.168.3.2

5- Last valid: 193.168.3.126

6- Default gateway: 193.168.3.1 (ROUTER)

2 22 42 62

SERVER

server IP: 172.125.12.9

submit mask : 255.255.0.0

default gateway: 172.125.12.1