PRAKTIKUM 1

1. Tentukan blok subnet yang terbentuk dari Host IP Address 192.168.100.100/26 dengan melengkapi table di bawah ini:

Subnet	192.168.100.0	192.168.100.64	192.168.100.128	192.168.100.192
IP Host pertama	192.168.100.1	192.168.100.65	192.168.100.129	192.168.100.193
IP host terakhir	192.168.100.62	192.168.100.126	192.168.100.190	192.168.100.254
IP Broadcast	192.168.100.63	192.168.100.127	192.168.100.191	192.168.100.255

Jawabanya:

192.168.100.100/26

(11111111.11111111.11111111.11000000)

Jumlah subnet = 2^y=2^2 = 4

Jumlah host =2^x-2=2^6-2=62

Subnet 1

Network = 192.168.100.100

IP Pertama = 192.168.100.1

IP Terakhir = 192.168.100.62

Broadcast = 192.168.100.63

Subnet 2

Network = 192.168.100.64

IP Pertama = 192.168.100.65

IP Terakhir = 192.168.100.126

Broadcast = 192.168.100.127

Subnet 3

Network = 192.168.100.128

IP Pertama = 192.168.100.129

IP Terakhir = 192.168.100.190

Broadcast = 192.168.100.191

Subnet 4

Network = 192.168.100.192

IP Pertama = 192.168.100.193

IP Terakhir = 192.168.100.254

Broadcast = 192.168.100.255

*Jika kolomnya kurang silahkan di tambah atau jika berlebih silahkan dikurangi sesuia dengan hasil yang anda dapatkan

2. Dari Host IP Berikut 172.168.100.200/19 tentukanlah

   a. Number of subnet bits : 11111111

   b. Number of subnet created : 8

   c. Number of host bit per subnet : 0, 32, 64, 96, 128, 160, 192, 224.

   d. Number of host created : 8190

   e. Ipv 4 Address of first Host on this Subnet : 172.168.0.1, 172.168.32.1, 172.168.64.1, 172.168.96.1, 172.168.128.1, 172.168.160.1. 172.168.192.1, 172.168.224.1

   f. Ipv 4 Address of last Host on this Subnet : 172.168.31.254, 172.168.63.254, 172.168.95.254, 172.168.127.254, 172.168.159.254, 172.168.191.254, 172.168.223.254, 172.168.255.254

g. Ipv 4 Broadcast Address on this Subnet : 172.168.31.254, 172.168.63.254, 172.168.95.254, 172.168.127.254, 172.168.159.254, 172.168.191.254, 172.168.223.254, 172.168.255.254

***JAWABAN DILENGKAPI DENGAN PERHITUNGAN MASING-MASING SOAL**

PRAKTIKUM 2

Politeknik Negeri Batam akan membangun jaringan internet dengan alamat jaringan 10.10.0.0/12 dan kebutuhan host sebagai berikut:

Host untuk dosen = 400
Host untuk mahasiswa = 2000
Host untuk TU = 64
Host untuk Tamu = 127

Tentukanlah Network address, IP Address pertama, IP Address terakhir dan IP Broadcast untuk masing-masing host di atas!

Host untuk dosen = 400

Network address: 10.0.0.0/12

First ip address:

10.15.255.254

Last ip address: 10.0.0.1

Broadcast: 10.15.255.255

Host untuk mahasiswa = 2000

Network address: 10.0.0.0/12

First ip address:

10.10.255.254

Last ip address: 10.0.0.1

Broadcast: 10.15.255.255

Host untuk TU= 64Network

address: 10.0.0.0/12 First ip

address: 10.11.255.254 Last ip

address: 10.0.0.10

Broadcast: 10.15.255.255

Host untuk Tamu = 127

Network address: 10.0.0.0/12

First ip address: 10.20.255.254

Last ip address: 10.0.0.20

Broadcast: 10.15.255.255

***JAWABAN DILENGKAPI DENGAN PERHITUNGAN MASING-MASING SOAL**

Simpan praktikum dengan nama file NI_NAMA.Pdf (Praktikum dijadikan 1 file saja)