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TUGAS

Sebuah perusahaan swasta memiliki 5 divisi yang masing :

- Divisi HRD membutuhkan 9 user
- Divisi Marketing membutuhkan 60 user
- Divisi Financial membutuhkan 12 user
- Divisi Teknisi Gangguan membutuhkan 100 user
- Divisi Operator dan Administrasi membutuhkan 30 user

Diberikan alamat network 192.168.1.0 /24

Desainlah IP Address jaringan tersebut dengan menggunakan metode VLSM

JAWABAN

→ Dari kelima user diurutkan dari terbanyak / terbesar

- | | |
|------------------------------|----------|
| 1. Teknisi Gangguan | 100 User |
| 2. Marketing | 60 User |
| 3. Operator dan Administrasi | 30 User |
| 4. Financial | 12 User |
| 5. HRD | 9 User |

→ Alamat network 192.168.1.0 /24

→ Menentukan Jumlah Host per Subnet

- | | | | | | | |
|--------|-------|-------|---------|------------|-----------|-------|
| 1. TG | → 100 | = /25 | = 2^7 | → 10000000 | = 128 - 2 | = 126 |
| 2. M | → 60 | = /26 | = 2^6 | → 11000000 | = 64 - 2 | = 62 |
| 3. OA | → 30 | = /27 | = 2^5 | → 11100000 | = 32 - 2 | = 30 |
| 4. F | → 12 | = /28 | = 2^4 | → 11110000 | = 16 - 2 | = 14 |
| 5. HRD | → 9 | = /28 | = 2^4 | → 11110000 | = 16 - 2 | = 14 |

→ Dicari Satu - Satu :

Alamat network → 192.168.1.0 /24

a. 100 User → /25 = 128

Subnet = 192.168.1.0 /25

Range = Host Pertama Host terakhir

192.168.1.1 - 192.168.1.126

Broadcast = 192.168.1.127

b. 60 user $\rightarrow /26 = 64$

Subnet = 192.168.1.128 / 26

Range = Host Pertama - Host terakhir
192.168.1.129 - 192.168.1.190

Broadcast = 192.168.1.191

c. 30 user $\rightarrow /27 = 32$

Subnet = 192.168.1.192 / 27

Range = Host Pertama - Host terakhir

= 192.168.1.193 - 192.168.1.222

Broadcast = 192.168.1.223

d. 12 user $\rightarrow /28 = 16$

Subnet = 192.168.1.224 / 28

Range = Host pertama - Host Terakhir
192.168.1.225 - 192.168.1.238

Broadcast = 192.168.1.239

e. 9 user $\rightarrow /28 = 16$

Subnet = 192.168.1.240 / 28

Range = Host pertama - Host terakhir
192.168.1.241 - 192.168.1.254

Broadcast = 192.168.1.255

Tabel

	TG (100)	Mektg (60)	OA (30)	F (12)	HRD (9)
Network / Subnet	192.168.1.0	192.168.1.128	192.168.1.192	192.168.1.224	192.168.1.240
Host Pertama	192.168.1.1	192.168.1.129	192.168.1.193	192.168.1.225	192.168.1.241
Host Terakhir	192.168.1.126	192.168.1.190	192.168.1.222	192.168.1.238	192.168.1.254
Broadcast	192.168.1.127	192.168.1.191	192.168.1.223	192.168.1.239	192.168.1.255