1. Topologi dari basis data terdisktribusi

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Jenis Tppologi | Definisi | Gambar | Contoh |
| 1 | Fully Connected Newtwork | Terkoneksi dengan situs lainnya. Link yang ada menjadi banyak menyebabkan biaya menjadi membengkak. |  |  |
| 2 | Partially Connected Network | Link yang ada hanya beberapa situs sehingga biaya instalasi lebih rendah. |  |  |
| 3 | Tree Structed Network | Biaya instalasi dan komunikasi jenis ini biasanya paling rendah. Jika terjadi failure maka akses data menjadi lambat. |  |  |
| 4 | Ring Network | Biaya komunikasi tinggi jika ingin mengakses sebuah situs jadi harus menempuh banyak link. |  |  |
| 5 | Star Network | Biaya komunikasi rendah karena setiap situs paling banyak mengakses dua link ke situs lain. |  |  |

2. terdapat 2 tipe basis data terdisktribusi yaitu

1. Homogen
2. Heterogen

3. **Fragmentasi Horizontal**

1. . Relasi Matkul = “Kalkulus”

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| NIM | Nama\_Mhs | TTL | Matkul | Kode\_Matkul | SKS | Nilai | Bobot |
| 10523001 | Andi | 3/1/1992 | Kalkulus | 101 | 4 | A | 4 |
| 10523002 | Budi | 5/2/1992 | Kalkulus | 101 | 4 | A | 4 |
| 10523005 | Elsa | 18/5/1992 | Kalkulus | 101 | 4 | A | 4 |

B). Relasi Matkul = “Basis Data”

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| NIM | Nama\_Mhs | TTL | Matkul | Kode\_Matkul | SKS | Nilai | Bobot |
| 10523001 | Andi | 3/1/1992 | Basis Data | 102 | 3 | B | 3 |
| 10523002 | Citra | 12/4/1992 | Basis Data | 102 | 3 | A | 4 |
| 10523005 | Doni | 18/5/1992 | Basis Data | 102 | 3 | A | 3 |

**Fragmentasi Vertical**

A). Relasi 1 = Nama\_Mhs, TTL, Matkul, SKS, Nilai, Bobot, Tuple\_ID

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| NIM | Nama\_Mhs | TTL | Matkul | SKS | Nilai | Bobot | Tuple\_ID |
| 10523001 | Andi | 3/1/1992 | Kalkulus | 4 | B | 3 | 1 |
| 10523001 | Andi | 3/1/1992 | Basis Data | 3 | A | 4 | 2 |
| 10523001 | Andi | 3/1/1992 | Sistem Operasi | 3 | A | 3 | 3 |
| 10523002 | Budi | 5/2/1992 |  |  |  |  |  |

A). Relasi 2 = NIM, TTL, Kode\_Matkul, SKS, Nilai, Bobot, Tuple\_ID

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| NIM | Kode\_Matkul | SKS | Nilai | Bobot | Tuple\_ID |
| 10523001 | 101 | 4 | B | 3 | 1 |
| 10523001 | 102 | 3 | A | 4 | 2 |
| 10523001 | 103 | 3 | A | 3 | 3 |
| 10523002 | 101 | 4 | A | 3 | 4 |

**Fragmentasi Campuran**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| NIM | Nama\_Mhs | Matkul | Kode\_Matkul | SKS | Nilai | Bobot | Tuple\_ID |
| 10523001 | Andi | Basis Data | 102 | 3 | B | 3 | 1 |
| 10523002 | Citra | Basis Data | 102 | 3 | A | 4 | 2 |
| 10523005 | Doni | Basis Data | 102 | 3 | A | 3 | 3 |