**BASIS DATA LANJUTAN NORMALISASI**

**Aturan Normalisasi**

* Hilangkan kelompok berulang
* Hilangkan data berulang
* Hilangkan kolom yang tidak bergantung pada kunci
* Pisahkan relasi majemuk
* Pisahkan relasi majemuk yang berhubungan secara semantik
* Bentuk normal optimal
* Bentuk normal domain-key

- (P# ,b#,qty) dimana

P# : Kode pemasok (kunci utama)

B# : Barang yang dipasok

Qty : Jumlah barang yang dipasok

**Normalisasi 1NF**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **P#** | **Status** | **Kota** | **B#** | **Qty** |
| P1  P1  P1  P1  P1  P1 | 20  20  20  20  20  20 | Yogya  Yogya  Yogya  Yogya  Yogya  Yogya | B1  B2  B3  B4  B5  B6 | 300  200  400  200  100  100 |
| P2  P2 | 10  10 | Medan  Medan | B1  B2 | 300  200 |
| P3 | 20 | Medan | B3 | 400 |
| P4  P4  P4 | 10  10  10 | Yogya  Yogya  Yogya | B4  B5  B6 | 200  100  100 |

**Normalisasi 2NF**

Status

B#

Qty

P#

Kota

**Tabel Barang**

|  |  |  |
| --- | --- | --- |
| **P#** | **B#** | **Qty** |
| P1  P1  P1  P1  P1  P1 | B1  B2  B3  B4  B5  B6 | 300  200  400  200  100  100 |
| P2  P2 | B1  B2 | 300  200 |
| P3 | B3 | 400 |
| P4  P4  P4 | B4  B5  B6 | 200  100  100 |

**Tabel Pemasok**

|  |  |  |
| --- | --- | --- |
| **P#** | **Status** | **Kota** |
| P1  P1  P1  P1  P1  P1 | 20  20  20  20  20  20 | Yogya  Yogya  Yogya  Yogya  Yogya  Yogya |
| P2  P2 | 10  10 | Medan  Medan |
| P3 | 10 | Medan |
| P4  P4  P4 | 10  10  10 | Yogya  Yogya  Yogya |

**Normalisasi 3NF**

|  |  |
| --- | --- |
| **P#** | **Status** |
| P1 | 20 |
| P2 | 10 |
| P3 | 20 |
| P4 | 10 |

|  |  |
| --- | --- |
| **Status** | **Kota** |
| 20 | Yogya |
| 10 | Medan |
| 20 | Medan |
| 10 | Yogya |