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LAPORAN PRAKTIKUM 6

Langkah-Langkah Praktikum Beserta Outputnya

- Membuat database

```
create database Praktikum6;
```

- Masuk ke database

```
use Praktikum6;
```

- Buat table perusahaan

```
create table perusahaan  
(id_p varchar(10) primary key,  
nama varchar(20),  
alamat varchar(20)  
);
```

- Mengisi table

```
INSERT INTO `` (`id_p`,`nama`,`alamat`) VALUES ('P01','Kantor Pusat','');  
INSERT INTO `` (`id_p`,`nama`,`alamat`) VALUES ('P02','Cabang Bekasi','');
```

Output

| | id_p | nama | alamat |
|---|------|---------------|--------|
| ▶ | P01 | Kantor Pusat | |
| | P02 | Cabang Bekasi | |
| * | NULL | NULL | NULL |

- Buat tabel departemen

```
create table departemen (
id_dept varchar(10) primary key,
nama varchar(20),
id_p varchar(20),
manajer_nk varchar(10),
constraint fk_depatemen_perusahaan foreign key (id_p) references perusahaan(id_p)
```

```
INSERT INTO `(`id_dept`,`nama`,`id_p`,`manajer_nk`) VALUES ('D01','Produksi','P02','N01');
INSERT INTO `(`id_dept`,`nama`,`id_p`,`manajer_nk`) VALUES ('D02','Marketing','P01','N03');
INSERT INTO `(`id_dept`,`nama`,`id_p`,`manajer_nk`) VALUES ('D03','RnD','P02','');
INSERT INTO `(`id_dept`,`nama`,`id_p`,`manajer_nk`) VALUES ('D04','Logitik','P02','');
```

Output

| | id_dept | nama | id_p | manajer_nk |
|---|---------|-----------|------|------------|
| ▶ | D01 | Produksi | P02 | N01 |
| | D02 | Marketing | P01 | N03 |
| | D03 | RnD | P02 | |
| | D04 | Logitik | P02 | |
| ✱ | NULL | NULL | NULL | NULL |

- Buat table karyawan

```
create table karyawan (
nik varchar(10) primary key,
nama varchar(20),
id_dept varchar(20),
sup_nk varchar(10),
constraint fk_karyawan_departemen foreign key (id_dept) references departemen(id_dept)
);
```

```
INSERT INTO `(`nik`,`nama`,`id_dept`,`sup_nk`) VALUES ('N01','Ari','D01','');
INSERT INTO `(`nik`,`nama`,`id_dept`,`sup_nk`) VALUES ('N02','Dina','D01','');
INSERT INTO `(`nik`,`nama`,`id_dept`,`sup_nk`) VALUES ('N03','Rika','D03','');
INSERT INTO `(`nik`,`nama`,`id_dept`,`sup_nk`) VALUES ('N04','Ratih','D01','N01');
INSERT INTO `(`nik`,`nama`,`id_dept`,`sup_nk`) VALUES ('N05','Riko','D01','N01');
INSERT INTO `(`nik`,`nama`,`id_dept`,`sup_nk`) VALUES ('N06','Dani','D02','');
INSERT INTO `(`nik`,`nama`,`id_dept`,`sup_nk`) VALUES ('N07','Anis','D02','N06');
INSERT INTO `(`nik`,`nama`,`id_dept`,`sup_nk`) VALUES ('N08','Dika','D02','N06');
```

Output

| | nik | nama | id_dept | sup_nk |
|---|------|-------|---------|--------|
| ▶ | N01 | Ari | D01 | |
| | N02 | Dina | D01 | |
| | N03 | Rika | D03 | |
| | N04 | Ratih | D01 | N01 |
| | N05 | Riko | D01 | N01 |
| | N06 | Dani | D02 | |
| | N07 | Anis | D02 | N06 |
| | N08 | Dika | D02 | N06 |
| ✱ | NULL | NULL | NULL | NULL |

- Buat table project

```
create table project(
  id_project varchar(10) primary key,
  nama varchar(20),
  tgl_mulai datetime,
  tgl_selesai datetime,
  status tinyint(1)
);
```

```
INSERT INTO `(`id_project`,`nama`,`tgl_mulai`,`tgl_selesai`,`status`) VALUES ('PJ01','A','2019-01-10 00:00:00','2019-03-10 00:00:00',1);
INSERT INTO `(`id_project`,`nama`,`tgl_mulai`,`tgl_selesai`,`status`) VALUES ('PJ02','B','2019-02-15 00:00:00','2019-04-10 00:00:00',1);
INSERT INTO `(`id_project`,`nama`,`tgl_mulai`,`tgl_selesai`,`status`) VALUES ('PJ03','C','2019-03-21 00:00:00','2019-05-10 00:00:00',1);
```

Output

| | id_project | nama | tgl_mulai | tgl_selesai | status |
|---|------------|------|---------------------|---------------------|--------|
| ▶ | PJ01 | A | 2019-01-10 00:00:00 | 2019-03-10 00:00:00 | 1 |
| | PJ02 | B | 2019-02-15 00:00:00 | 2019-04-10 00:00:00 | 1 |
| | PJ03 | C | 2019-03-21 00:00:00 | 2019-05-10 00:00:00 | 1 |
| ✱ | NULL | NULL | NULL | NULL | NULL |

- Buat table project detail

```
create table project_detail (
  id_project varchar(10),
  nik varchar(20),
  constraint fk_project_detail_karyawan foreign key (nik) references karyawan(nik)
);
```

```
INSERT INTO `(`id_project`,`nama`,`tgl_mulai`,`tgl_selesai`,`status`) VALUES ('PJ01','A','2019-01-10 00:00:00','2019-03-10 00:00:00',1);
INSERT INTO `(`id_project`,`nama`,`tgl_mulai`,`tgl_selesai`,`status`) VALUES ('PJ02','B','2019-02-15 00:00:00','2019-04-10 00:00:00',1);
INSERT INTO `(`id_project`,`nama`,`tgl_mulai`,`tgl_selesai`,`status`) VALUES ('PJ03','C','2019-03-21 00:00:00','2019-05-10 00:00:00',1);
```

Output

| | id_project | nik |
|--|------------|-----|
| | PJ01 | N02 |
| | PJ01 | N03 |
| | PJ01 | N04 |
| | PJ01 | N05 |
| | PJ01 | N07 |
| | PJ01 | N08 |
| | PJ02 | N01 |
| | PJ02 | N03 |
| | PJ02 | N05 |
| | PJ03 | N03 |
| | PJ03 | N07 |
| | PJ03 | N08 |

Praktikum

- Departemen apa saja yang terlibat dalam tiap-tiap project

```
select p.nama, d.nama from project p
join project_detail pd on p.id_project=pd.id_project
join karyawan k on pd.nik=k.nik
join departemen d on k.id_dept=d.id_dept;
```

Output

| | nama | nama |
|---|------|-----------|
| ▶ | A | Produksi |
| | B | Produksi |
| | A | Produksi |
| | A | Produksi |
| | A | Produksi |
| | B | Produksi |
| | A | Marketing |
| | C | Marketing |
| | A | Marketing |
| | C | Marketing |
| | A | RnD |
| | B | RnD |
| | C | RnD |

- Jumlah karyawan tiap departemen yang bekerja pada tiap-tiap project

```
select p.nama, d.nama, count(k.nik) as jumlah_karyawan from project p
join project_detail pd on p.id_project=pd.id_project
join karyawan k on pd.nik=k.nik
join departemen d on k.id_dept=d.id_dept
group by p.nama,d.nama;
```

Output

| | nama | nama | jumlah_karyawan |
|---|------|-----------|-----------------|
| ▶ | A | Produksi | 4 |
| | B | Produksi | 2 |
| | A | Marketing | 2 |
| | C | Marketing | 2 |
| | A | RnD | 1 |
| | B | RnD | 1 |
| | C | RnD | 1 |

- Ada berapa project yang sedang dikerjakan oleh departemen RnD?(KETERANGAN: project berjalan adalah yang statusnya 1)

```
select count(p.id_project) as jumlah_project from project p
join project_detail pd on p.id_project=pd.id_project
join karyawan k on pd.nik=k.nik
join departemen d on k.id_dept=d.id_dept
where d.nama='RnD' and P.statuss=1;
```

Output

| | jumlah_project |
|---|----------------|
| ▶ | 3 |

- Berapa project yang sedang dikerjakan ari

```
select count(p.id_project) as jumlah_project from project p
join project_detail pd on p.id_project=pd.id_project
join karyawan k on pd.nik=k.nik
join departemen d on k.id_dept=d.id_dept
where k.nama='ari';
```

Output

| | jumlah_project |
|---|----------------|
| ▶ | 2 |

- Siapa yang mengerjakan proyek b

```
select k.nama from project p
join project_detail pd on p.id_project=pd.id_project
join karyawan k on pd.nik=k.nik
join departemen d on k.id_dept=d.id_dept
where p.nama='b'
```

Output

| | nama |
|---|------|
| ▶ | Ari |
| | Rika |
| | Riko |