Nama : Dzaky Alaudin Malik

Nim   : 31220495

Kelas   : TI.22.A.5

LAPORAN PRAKTIKUM 6

Langkah-Langkah Praktikum Beserta Outputnya

- Membuat database

```
create database Praktikum6;
```

- Masuk ke database
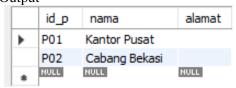
```
use Praktikum6;
```

- 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,
 statuss tinyint(1)
);
```

```
INSERT INTO `` (`id_project`,`nama`,`tgl_mulai`,`tgl_selesai`,`statuss`) 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`,`statuss`) 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`,`statuss`) VALUES ('PJ03','C','2019-03-21
00:00:00','2019-05-10 00:00:00',1);
```

Output

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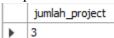
```
select p.nama, d.nama, count(k.nik) as jumlah_karyawan from project p
join project_detail pd  on p.id_project=pd.id_project
join karyawan k on pd.nik=k.nik
join departemen d on k.id_dept=d.id_dept
group by p.nama,d.nama;
```

Output

nama	nama	jumlah_karyawan
A	Produksi	4
B	Produksi	2 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?(KETERENGAN: 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;
```
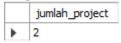
Output

jumlah_project
3

- Berapa project yang sedang dikarjakan 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