BASIS DATA

LAPORAN UJIAN TENGAH SEMESTER

Oleh :

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Laporan Ujian Tengah Semester:

1. Membuat Table

```
MySQL [uts]> create table penugasan(
    -> id int primary key,
    -> tanggal_mulai date,
    -> tanggal_selesai date,
    -> peran varchar(150),
    -> id_pegawai int,
    -> id_proyek int,
    -> foreign key (id_pegawai) references pegawai(nip),
    -> foreign key (id_proyek) references proyek(id));
Query OK, 0 rows affected (0.035 sec)
```

```
MySQL [uts]> create table proyek (
    -> id int primary key,
    -> nama_proyek varchar(15),
    -> nama_klien varchar(150),
    -> tanggal_mulai date,
    -> tanggal_selesai date,
    -> status enum("berjalan","selesai","dibatalkan"),
    -> anggaran int);
Query OK, 0 rows affected (0.016 sec)
```

```
MySQL [uts]> create table pegawai(
    -> nip int primary key,
    -> nama_lengkap varchar(150),
    -> jabatan varchar(150),
    -> tanggal_bergabung date,
    -> status bool);
Query OK, 0 rows affected (0.014 sec)
```

2. Menambah data ke table

```
MySQL [uts]> insert into pegawai (nip,nama_lengkap,jabatan,tanggal_bergabung,status) values
    -> (1,"Ray","pegawai","2024-05-3",True),
    -> (2,"Xei","Boss","2020-05-3",True),
    -> (3,"Her","Pegawai","2025-08-4",False);
Query OK, 3 rows affected (0.004 sec)
Records: 3  Duplicates: 0  Warnings: 0
```

```
MySQL [uts]> insert into penugasan (id,tanggal_mulai,tanggal_selesai,peran,id_pegawai,id_proyek) values
    -> (1,"2022-04-12","2023-05-4","Programmer",2,1),
    -> (2,"2024-07-21","2024-02-9","Design",2,1),
    -> (3,"2024-02-21","2024-04-2","Frontend",1,2);
Query OK, 3 rows affected (0.005 sec)
Records: 3  Duplicates: 0  Warnings: 0
```

```
MySQL [uts]> insert into proyek (id,nama_proyek,nama_klien,tanggal_mulai,tanggal_selesai,status,anggaran) values
    -> (2,"Studi","Yui","2024-02-12","2025-05-1","berjalan",1500000),
    -> (3,"Design","Nek","2024-01-20","2025-07-24","dibatalkan",2500000);
Query OK, 2 rows affected (0.003 sec)
Records: 2  Duplicates: 0  Warnings: 0
```

3. Memunculkan Table

```
MySQL [uts]> select * from penugasan;
+----+---------------+----------------+-----------+------------+-----------+
| id | tanggal_mulai | tanggal_selesai | peran     | id_pegawai | id_proyek |
+----+---------------+----------------+-----------+------------+-----------+
|  1 | 2022-04-12    | 2023-05-04     | Programmer |         2 |         1 |
|  2 | 2024-07-21    | 2024-02-09     | Design    |          2 |         1 |
|  3 | 2024-02-21    | 2024-04-02     | Frontend  |          1 |         2 |
+----+---------------+----------------+-----------+------------+-----------+
3 rows in set (0.000 sec)
```

```
MySQL [uts]> select * from proyek;
+----+-------------+------------+---------------+----------------+------------+----------+
| id | nama_proyek | nama_klien | tanggal_mulai | tanggal_selesai | status     | anggaran |
+----+-------------+------------+---------------+----------------+------------+----------+
|  1 | Programmer  | alex       | 2022-04-02    | 2023-06-10     | selesai    | 1000000  |
|  2 | Studi       | Yui        | 2024-02-12    | 2025-05-01     | berjalan   | 1500000  |
|  3 | Design      | Nek        | 2024-01-20    | 2025-07-24     | dibatalkan | 2500000  |
+----+-------------+------------+---------------+----------------+------------+----------+
3 rows in set (0.000 sec)
```

```
MySQL [uts]> select * from pegawai
    -> ;
+-----+--------------+---------+------------------+--------+
| nip | nama_lengkap | jabatan | tanggal_bergabung | status |
+-----+--------------+---------+------------------+--------+
|   1 | Ray          | pegawai | 2024-05-03       |      1 |
|   2 | Xei          | Boss    | 2020-05-03       |      1 |
|   3 | Her          | Pegawai | 2025-08-04       |      0 |
+-----+--------------+---------+------------------+--------+
3 rows in set (0.000 sec)
```

4. Mengupdate kolom

```
MySQL [uts]> update pegawai
    -> set jabatan = "Boss"
    -> where nip = 1;
Query OK, 1 row affected (0.003 sec)
Rows matched: 1  Changed: 1  Warnings: 0

MySQL [uts]> select * from pegawai where nip = 1;
+-----+--------------+---------+------------------+--------+
| nip | nama_lengkap | jabatan | tanggal_bergabung | status |
+-----+--------------+---------+------------------+--------+
|   1 | Ray          | Boss    | 2024-05-03       |      1 |
+-----+--------------+---------+------------------+--------+
1 row in set (0.000 sec)
```

5. Delete Field

```
MySQL [uts]> delete from pegawai where nip = 3
    -> ;
Query OK, 1 row affected (0.002 sec)

MySQL [uts]> select * from pegawai where nip = 3
    -> ;
Empty set (0.000 sec)

MySQL [uts]>
```

6. Alias

```
MySQL [uts]> select
    -> nip as "Nomor Pegawai",
    -> nama_lengkap as "full name",
    -> jabatan as "posisi",
    -> status as "keadaan"
    -> from pegawai;
+--------------+-----------+--------+---------+
| Nomor Pegawai | full name | posisi | keadaan |
+--------------+-----------+--------+---------+
|            1 | Ray       | Boss   |       1 |
|            2 | Xei       | Boss   |       1 |
+--------------+-----------+--------+---------+
2 rows in set (0.000 sec)

MySQL [uts]>
```

7. limit

```
MySQL [uts]> select * from proyek where anggaran > 0 order by anggaran limit 2;
+----+-------------+------------+---------------+----------------+----------+----------+
| id | nama_proyek | nama_klien | tanggal_mulai | tanggal_selesai | status   | anggaran |
+----+-------------+------------+---------------+----------------+----------+----------+
|  1 | Programmer  | alex       | 2022-04-02    | 2023-06-10     | selesai  | 1000000  |
|  2 | Studi       | Yui        | 2024-02-12    | 2025-05-01     | berjalan | 1500000  |
+----+-------------+------------+---------------+----------------+----------+----------+
2 rows in set (0.001 sec)

MySQL [uts]>
```

8. Order by

```
MySQL [uts]> select * from proyek order by anggaran asc,id desc;
+----+-------------+------------+---------------+----------------+------------+----------+
| id | nama_proyek | nama_klien | tanggal_mulai | tanggal_selesai | status     | anggaran |
+----+-------------+------------+---------------+----------------+------------+----------+
|  1 | Programmer  | alex       | 2022-04-02    | 2023-06-10     | selesai    | 1000000  |
|  2 | Studi       | Yui        | 2024-02-12    | 2025-05-01     | berjalan   | 1500000  |
|  3 | Design      | Nek        | 2024-01-20    | 2025-07-24     | dibatalkan | 2500000  |
+----+-------------+------------+---------------+----------------+------------+----------+
3 rows in set (0.000 sec)
```

9. Join

```
MySQL [uts]> select * from pegawai
    -> join proyek on (pegawai.nip = proyek.id);
+-----+--------------+---------+------------------+--------+----+-------------+------------+--------------+----------------+----------+----------+
| nip | nama_lengkap | jabatan | tanggal_bergabung | status | id | nama_proyek | nama_klien | tanggal_mulai | tanggal_selesai | status   | anggaran |
+-----+--------------+---------+------------------+--------+----+-------------+------------+--------------+----------------+----------+----------+
|   1 | Ray          | Boss    | 2024-05-03       |      1 |  1 | Programmer   | alex       | 2022-04-02   | 2023-06-10     | selesai  | 1000000  |
|   2 | Xei          | Boss    | 2020-05-03       |      1 |  2 | Studi        | Yui        | 2024-02-12   | 2025-05-01     | berjalan | 1500000  |
+-----+--------------+---------+------------------+--------+----+-------------+------------+--------------+----------------+----------+----------+
2 rows in set (0.000 sec)

MySQL [uts]> |
```