

TUGAS 4

SQL DDL

Latihan (.ppt halaman 20):

1. Dengan SQL Query, buat table baru “buku” dengan struktur sebagai berikut:

```

kode_buku    varchar2(3);
judul_buku   varchar2(20);
pengarang    varchar2(10);
penerbit     varchar2(20);
th_terbit    number(4);

```

2. Ubah struktur table diatas untuk ukuran (size) kolom pengarang menjadi 15.
3. Tambahkan kolom baru:


```

jumlah_buku  number(2);
harga_buku   number(7,2);

```
4. Hapus kolom **harga_buku**.

Jawaban :

1. Syntax :

```

mysql> create table if not exists buku(
-> kode_buku varchar(3) primary key,
-> judul_buku varchar(20),
-> pengarang varchar(10),
-> penerbit varchar(20),
-> th_terbit int(4)
-> );
Query OK, 0 rows affected

```

Output :

```

mysql> show tables;
+-----+
| Tables_in_latihan |
+-----+
| buku               |
+-----+
1 row in set

```

```

mysql> desc buku;
+-----+-----+-----+-----+-----+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| kode_buku  | varchar(3)    | NO   | PRI | NULL    |       |
| judul_buku | varchar(20)   | YES  |     | NULL    |       |
| pengarang  | varchar(10)   | YES  |     | NULL    |       |
| penerbit   | varchar(20)   | YES  |     | NULL    |       |
| th_terbit  | int(4)        | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
5 rows in set

```

2. Syntax :

```
mysql> alter table buku modify pengarang varchar(15);
Query OK, 0 rows affected
Records: 0 Duplicates: 0 Warnings: 0
```

Output :

```
mysql> desc buku;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| kode_buku  | varchar(3) | NO   | PRI | NULL    |       |
| judul_buku | varchar(20) | YES  |     | NULL    |       |
| pengarang  | varchar(15) | YES  |     | NULL    |       |
| penerbit   | varchar(20) | YES  |     | NULL    |       |
| th_terbit  | int(4)     | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
5 rows in set
```

3. Syntax :

```
mysql> alter table buku add (
jumlah_buku int(2), harga_buku int(7));
Query OK, 0 rows affected
Records: 0 Duplicates: 0 Warnings: 0
```

Output :

```
mysql> desc buku;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| kode_buku  | varchar(3) | NO   | PRI | NULL    |       |
| judul_buku | varchar(20) | YES  |     | NULL    |       |
| pengarang  | varchar(15) | YES  |     | NULL    |       |
| penerbit   | varchar(20) | YES  |     | NULL    |       |
| th_terbit  | int(4)     | YES  |     | NULL    |       |
| jumlah_buku | int(2)     | YES |     | NULL   |       |
| harga_buku  | int(7)     | YES |     | NULL   |       |
+-----+-----+-----+-----+-----+-----+
7 rows in set
```

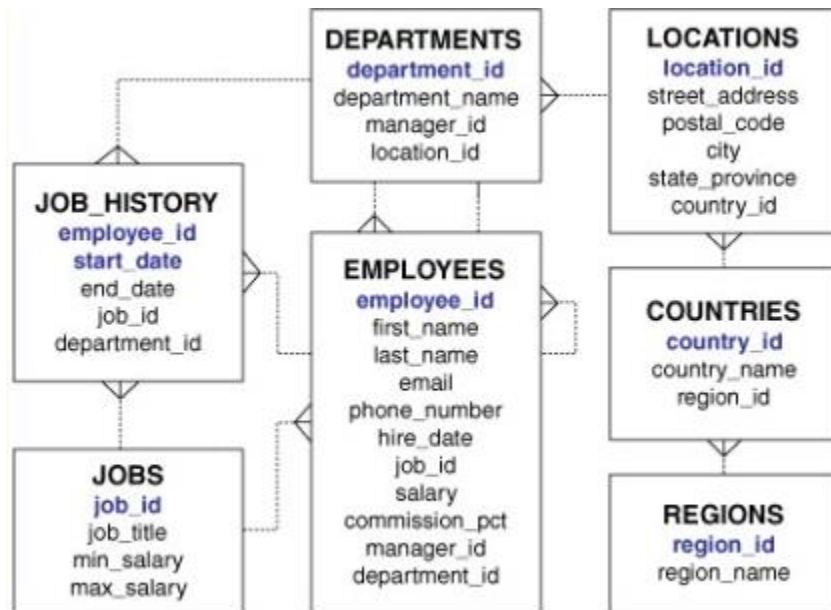
4. Syntax :

```
mysql> alter table buku
drop harga_buku;
Query OK, 0 rows affected
Records: 0 Duplicates: 0 Warnings: 0
```

Output :

```
mysql> desc buku;
+-----+-----+-----+-----+-----+-----+
| Field      | Type      | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| kode_buku  | varchar(3) | NO   | PRI | NULL    |       |
| judul_buku | varchar(20) | YES  |     | NULL    |       |
| pengarang  | varchar(15) | YES  |     | NULL    |       |
| penerbit   | varchar(20) | YES  |     | NULL    |       |
| th_terbit  | int(4)     | YES  |     | NULL    |       |
| jumlah_buku | int(2)     | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
6 rows in set
```

Latihan (.ppt halaman 21)



Soal

Perhatikan skema database Company di halaman berikutnya, buat perintah SQL untuk:

1. Membuat tabel departments dan locations (lengkap dengan constraint PK & FK).
2. Menambah kolom baru "Fields" pada tabel Departments (tipe data dan panjang bebas).
3. Melakukan pengubahan panjang kolom Fields dari panjang sebelumnya.
4. Menghapus Kolom Fields yang telah dibuat sebelumnya.

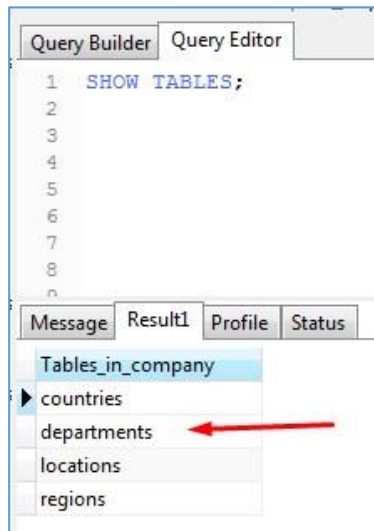
Jawaban

1. Syntax :

```

Query Builder  Query Editor
1 CREATE TABLE
2 IF NOT EXISTS departments (
3     department_id INT (3),
4     department_name VARCHAR (25),
5     manager_id INT (3),
6     location_id INT (3),
7     CONSTRAINT PK_department_id PRIMARY KEY (department_id),
8     CONSTRAINT FK_location_id FOREIGN KEY (location_id) REFERENCES locations (location_id)
9 );

Message  Profile  Status
[SQL]CREATE TABLE
IF NOT EXISTS departments (
    department_id INT (3),
    department_name VARCHAR (25),
    manager_id INT (3),
    location_id INT (3),
    CONSTRAINT PK_department_id PRIMARY KEY (department_id),
    CONSTRAINT FK_location_id FOREIGN KEY (location_id) REFERENCES locations (location_id)
);
Affected rows: 0
Time: 0.515s
  
```

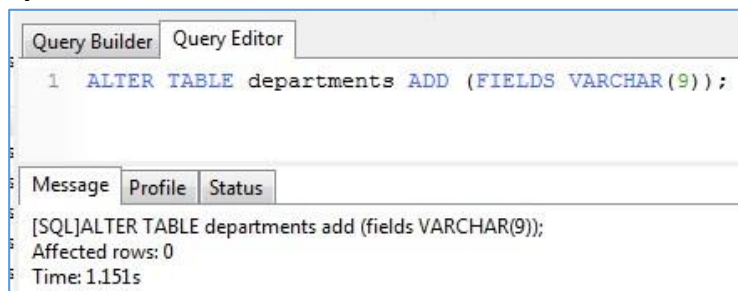
Output :

Query Builder Query Editor

```
1 desc departments ;
```

Message Result1 Profile Status

Field	Type	Null	Key	Default	Extra
department_id	int(3)	NO	PRI	0	
department_name	varchar(25)	YES		(Null)	
manager_id	int(3)	YES		(Null)	
location_id	int(3)	YES	MUL	(Null)	

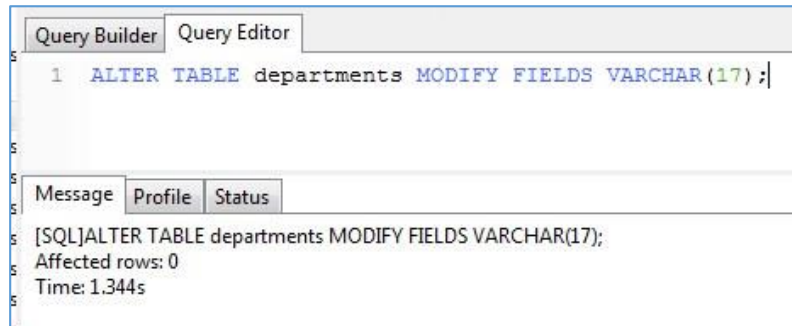
2. Syntax :**Output :**

Query Builder Query Editor

```
1 desc departments;
```

Message Result1 Profile Status

Field	Type	Null	Key	Default	Extra
department_id	int(3)	NO	PRI	0	
department_name	varchar(25)	YES		(Null)	
manager_id	int(3)	YES		(Null)	
location_id	int(3)	YES	MUL	(Null)	
fields	varchar(9)	YES		(Null)	

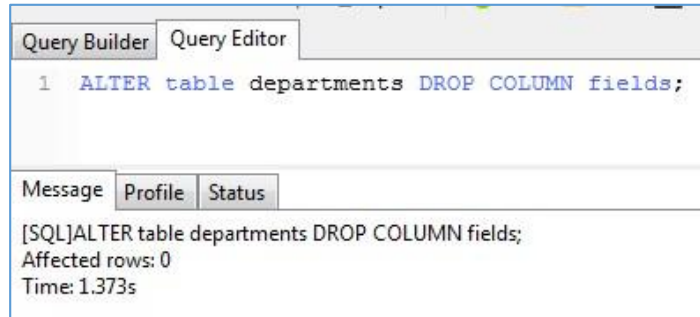
3. Syntax :**Output :**

Query Builder Query Editor

```
1 desc departments;
```

Message Result1 Profile Status

Field	Type	Null	Key	Default	Extra
department_id	int(3)	NO	PRI	0	
department_name	varchar(25)	YES		(Null)	
manager_id	int(3)	YES		(Null)	
location_id	int(3)	YES	MUL	(Null)	
FIELDS	varchar(17)	YES		(Null)	

4. Syntax :**Output :**

Query Builder Query Editor

```
1 desc departments;
```

Message Result1 Profile Status

Field	Type	Null	Key	Default	Extra
department_id	int(3)	NO	PRI	0	
department_name	varchar(25)	YES		(Null)	
manager_id	int(3)	YES		(Null)	
location_id	int(3)	YES	MUL	(Null)	