

More on Alter

This lesson continues the discussion on altering various structures in a database.

More on Alter

It is hard to predict what indexes to create without observing the access patterns for an application. We can add, remove, or modify indexes after the application is deployed. Note that modifying indexes doesn't change the data in the table.

Example Syntax

```
ALTER TABLE oldTableName
```

```
RENAME newTableName;
```

Connect to the terminal below by clicking in the widget. Once connected, the command line prompt will show up. Enter or copy and paste the command `./DataJek/Lessons/19lesson.sh` and wait for the MySQL prompt to start-up.

```
-- The lesson queries are reproduced below for convenient copy/paste into the terminal.
```

```
-- Query 1
```

```
ALTER TABLE Actors RENAME ActorsTable;
```

```
-- Query 2
```

```
DROP TABLE IF EXISTS ActorsTable;
```

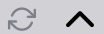
```
-- Query 3
```

```
DROP TABLE IF EXISTS Table1, Table2, Table3;
```

```
-- Query 4
```

```
-- Query 4  
DROP DATABASE IF EXISTS MovieIndustry;
```

Terminal



1. We can also rename a table after creating it. In the snippet below, we rename the Actors table to ActorsTable as follows:

```
ALTER TABLE Actors RENAME ActorsTable;
```

```
mysql> ALTER TABLE Actors RENAME ActorsTable;  
Query OK, 0 rows affected (0.01 sec)
```

```
mysql> SHOW TABLES;  
+-----+  
| Tables_in_MovieIndustry |  
+-----+  
| ActorsTable              |  
+-----+  
1 row in set (0.00 sec)
```

2. We have already discussed dropping tables, but we can use a slightly improved query using the **IF EXISTS** clause.

```
DROP TABLE IF EXISTS ActorsTable;
```

Executing the above query multiple times will not result in an error once the table is already deleted. The **IF EXISTS** clause is useful when deletion occurs in an automated script. The script continues to execute even if the table has previously been deleted.

```
mysql> SHOW TABLES;
+-----+
| Tables_in_MovieIndustry |
+-----+
| ActorsTable              |
+-----+
1 row in set (0.00 sec)

mysql> DROP TABLE IF EXISTS ActorsTable;
Query OK, 0 rows affected (0.01 sec)

mysql> DROP TABLE IF EXISTS ActorsTable;
Query OK, 0 rows affected, 1 warning (0.00 sec)

mysql> DROP TABLE IF EXISTS ActorsTable;
Query OK, 0 rows affected, 1 warning (0.00 sec)

mysql> SHOW TABLES;
Empty set (0.00 sec)
```

3. We can delete multiple tables in a single statement by specifying a comma-separated list of table names to delete.

```
DROP TABLE IF EXISTS Table1, Table2, Table3;
```

4. We can drop the entire database as follows:

```
DROP DATABASE IF EXISTS MovieIndustry;
```

```
mysql> DROP DATABASE IF EXISTS MovieIndustry;  
Query OK, 0 rows affected (0.01 sec)
```

```
mysql> SHOW DATABASES;
```

| |
|--------------------|
| Database |
| information_schema |
| mysql |
| performance_schema |
| sys |

```
4 rows in set (0.00 sec)
```