MySQL ALTER TABLE

MySQL ALTER statement is used when you want to change the name of your table or any table field. It is also used to add or delete an existing column in a table.

The ALTER statement is always used with "ADD", "DROP" and "MODIFY" commands according to the situation.

1) ADD a column in the table

Syntax:

ALTER TABLE table name

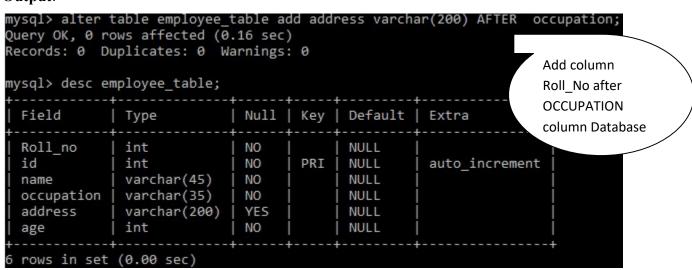
ADD new_column_name column_definition [**FIRST** | **AFTER** column_name];

Example: mysql> ALTER TABLE employee_table ADD Roll_no int not null FIRST;

Output:

Query OK, 0 ro Records: 0 Du mysql> desc em	ows affected (2 uplicates: 0 \ nployee_table;	2.22 seo	c) s: 0		not null FIRST;	Add column Roll_No at the
	Type					beginning.
Roll_no id name occupation age	int int varchar(45) varchar(35) int	NO NO NO NO NO	PRI	NULL NULL NULL NULL NULL	auto_increment	
5 rows in set	(0.05 sec)					- +

Example: mysql> ALTER TABLE employee_table ADD Roll_no int not null FIRST;



2) Add multiple columns in the table

Syntax:

Example: mysql> ALTER TABLE employee_table ADD Roll_no int not null FIRST;

Output:

```
ALTER TABLE employee table
mysql>
           ADD lname varchar(100) NOT NULL
           AFTER name,
           ADD Pin int(100) NOT NULL
           AFTER address;
Query OK, 0 rows affected, 1 warning (0.43 sec)
Records: 0 Duplicates: 0 Warnings: 1
mysql> desc employee table;
 Field
                Type
                                Null | Key
                                              D
                                                      In this example, we add two new
 Roll no
                int
                                NO
                                        PRI
 id
                int
                                NO
                                                      columns "Iname", and Pin in the
 name
                varchar(45)
                                NO
                                                      existing table "employee_table".
                varchar(100)
                                NO
  lname
                                                      Iname is added after name column
 occupation
                varchar(35)
                                NO
                varchar(200)
                                                      and Pin is added after address
 address
                                YES
 Pin
                int
                                NO
                                                      column.
                int
                                NO
  age
 rows in set (0.00 sec)
mysql>
```

3) MODIFY column in the table

The MODIFY command is used to change the column definition of the table.

Syntax:

```
ALTER TABLE table_name

MODIFY column_name column_definition [ FIRST | AFTER column_name ];
...;
```

Example:

mysql> ALTER TABLE employee table MODIFY name varchar(200) AFTER occupation;

Output:

Field	Туре	Null	Key	Default	Extra	
Roll_no id name lname occupation address Pin age	int int varchar(45) varchar(100) varchar(35) varchar(200) int int	NO NO NO NO NO YES NO	PRI	NULL NULL NULL NULL NULL NULL NULL NULL	auto_increment	
sql> alter t ery OK, 0 ro	table employee_tows affected (4	.26 sec)	name varch	ar(200) after occupat	ion;
ery OK, 0 ro cords: 0 Du sql> desc er	table employee_t	.26 sec)	name varch	ar(200) after occupat	ion;
sql> alter t ery OK, 0 ro cords: 0 Du	table employee_tows affected (4 uplicates: 0 Wa	.26 sec) : 0 +	name varch	++	ion;

4) DROP a column in the table

The MODIFY command is used to change the column definition of the table.

Syntax:

ALTER TABLE table_name DROP COLUMN column_name; ...;

Example:

mysql> alter table employee_table drop Pin;

mysql> desc er	mployee_table;						
+ Field	+ Type	Null	Key	Default	++ Extra		
Roll_no id lname occupation name address Pin age	int int varchar(100) varchar(35) varchar(200) varchar(200) int	NO NO NO NO YES YES NO	PRI	NULL NULL NULL NULL NULL NULL NULL NULL	auto_increment auto_increment 		
#							
Field	Туре	Null	Key	Default	Extra		
+	int int varchar(100) varchar(35) varchar(200) varchar(200)	-	PRI PRI Delete the	NULL NULL NULL ne <i>Pin</i> column e_table;	auto_increment from the		
t							

5) RENAME a column in the table

The MODIFY command is used to change the column definition of the table.

Syntax:

mysql> ALTER TABLE table_name CHANGE COLUMN old_name new_name column_definition [FIRST | AFTER column_name] ...;

Example:

mysql> ALTER TABLE employee_table CHANGE COLUMN Roll_no RNo int;

mysql> desc er	mployee_table;						
Field	Туре	Null	Key	Default	Extra		
Roll_No id lname occupation name address age	int int varchar(100) varchar(35) varchar(200) varchar(200) int	YES NO NO NO YES YES NO	PRI	NULL NULL NULL NULL NULL NULL	auto_increment		
7 rows in set (0.00 sec) mysql> ALTER TABLE employee_table CHANGE COLUMN Roll_no RNo int; Query OK, 0 rows affected (0.05 sec) Records: 0 Duplicates: 0 Warnings: 0 mysql> desc employee_table;							
Field	Туре	Null	Key	Default	Extra		
+	int int varchar(100) varchar(35) varchar(200) varchar(200) int	YES NO NO NO YES YES	Char to <i>RI</i>	O	n name Roll_No		
+							

N.B.

Try this command:

ALTER TABLE employee_table CHANGE name fname varchar(200) AFTER id;

6) RENAME a table

This command will change the name of the table.

Syntax:

mysql> **ALTER TABLE** table_name **RENAME** TO new_table_name;

Example:

mysql> ALTER TABLE employee_table RENAME to emp_table;

```
mysql> ALTER TABLE employee_table RENAME to emp_table;
Query OK, 0 rows affected (0.29 sec)

mysql> show tables;
+-----+
| Tables_in_university |
+-----+
| emp_table |
+-----+
1 row in set (0.25 sec)
```