Deleting Data

This lesson discusses how to delete data in MySQL.

Deleting Data

We can delete rows from a table using the **DELETE** statement. A delete statement deletes an entire row and not individual columns. If changing a particular column value for a row is desired, use the **UPDATE** statement, which we will cover next. Also realize that deleting all the rows of a table doesn't delete the table itself.

Example Syntax

DELETE FROM table

WHERE col3 > 5

ORDER BY col1

LIMIT 5;

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/13lesson.sh and wait for the MySQL prompt to start-up.

```
-- Query 2
DELETE FROM Actors WHERE Gender="Male";

-- Query 3
DELETE FROM Actors ORDER BY NetWorthInMillions DESC LIMIT 3;

-- Query 4
DELETE FROM Actors;
```

Terminal



1. We'll start with deleting just one row. In order to target a single row, we'll need to use the **WHERE** clause similar to how we used it with a select statement. Let's delete the row for the actress priyanka.

```
DELETE FROM Actors WHERE FirstName="priyanka";
```

```
mysql> SELECT ^ FROM Actors:
| 1 | Brod | Pitt | 1963-12-18 | Male | Single | 2 | Jennifer | Aniston | 1969-11-02 | Femole | Single | 3 | Angelino | Jolie | 1975-36-04 | Femole | Single | 4 | Johnny | Depp | 1963-26-09 | Male | Single | 5 | Natalie | Portman | 1981-26-09 | Male | Married | For | Cruise | 1962-27-03 | Male | Divorced | 7 | Kytie | Jenner | 1997-28-10 | Femole | Married | 8 | Kin | Kondushion | 1980-12-21 | Femole | Married | 9 | Anitobh | Bochchan | 1942-12-11 | Male | Married |
                                                                                                                                    240
                                                                                                                                    240 I
                                                                                                                                   180
                                                                                                                                   280
                                                                                                                                    60
                                                                                                                                   1880
| 9 | Anitobh | Bachchan | 1942-10-11 | Male | Married
| 18 | Shahrukh | Khan | 1965-11-02 | Male | Married
| 11 | priyanka | Chapma | 1982-07-18 | Female | Married
                                                                                                                                    189
                                                                                                                                   689
                                                                                                                                     28 1
11 rows in set (0.00 sec)
mysql> DELETE FROM Actors WHERE FirstName="priyonka";
Query OK, 1 now offected (0.00 sec)
mysql> SELECT * EROM Actors:
| Id|| FirstName | SecondName | DoB | | Gender | MaritalStatus | KetMorthInMillions |
   249 1
                                                                                                                                   189 1
                                                                                                                                   286 1
                                                                                                                                    68
                                                                                                                                    570
                                                                                                                                  1220
                                                                                                                                   3710
   9 | Amilabh | Bachchan | 1942-10-11 | Male | Morried
10 | Shahrukh | Khan | 1965-11-02 | Male | Morried
    rows in set (0.00 sec)
```

Note that the string comparison for the FirstName performed by MySQL doesn't take case into account and if we specified the **WHERE** clause with an uppercase as FirstName="PRIYANKA" the row would still be deleted.

2. The delete statement will delete all the matching rows, which in the previous example is only one. As an example, we can write a query to delete all male actors as follows:

DELETE FROM Actors WHERE Gender="Male";

ld FirstName	SecondNane	Dog	l Gender	MaritalStatus	NetWorthInMillions
1 Brad	Pitt	1963-12-18	Male	I Single	1 249
	I Aniston				240
3 Angelina	Jolie	1975-96-64	Female	I Single	100
4 Johnny	Depp	1963-96-69	Male	Single	200
	Portnan				69
6 Tan	Cruise	1962-07-03	Male	Divorced	570
7 Kylie	Jenner	1997-08-10	I Female	I Marmted	1939
	Kandashi an				370
9 Amitabh	Bachchan	1942-10-11	Male	l Marri ed	489
rows in set (0).00 sec)		+		629
	0.00 sec) ON Actors WHER offected (0.0)	E Gender-"Mal 1 sec)	t e";	+	
rows in set (& sql> DELETE FR0 ery CK, 6 rows sql> SELECT * A	0.00 sec) M Actors WHERI offected (0.0:	E Gender="Mal 1 sec) 	e"; + I Gender	+	NetWorthInMillions
rows in set (& sql> DELETE FR0 ery CK, 6 rows sql> SELECT * A Id FirstNone	D.00 sec) M. Actors WHERI affected (0.0: ROW Actors;	E Gender="Mal 1 sec) DaB	c"; +	+	 NetWorthInWillions
rows in set (& sql> DELETE FR0 ery CK, 6 rows sql> SELECT * A Id FirstNone	D.00 sec) M. Actors WHERI affected (0.0: ROW Actors;	E Gender="Mal 1 sec) DaB	c"; +		 NetWorthInWillions
rows in set (& sql> DELETE FR6 ery OK, 6 rows sql> SELECT * E Id FirstNone 2 Jennifer 3 Angelina	0.00 sec) M Actors WHERL offected (0.0) ROW Actors;	E Gender="Mal 1 sec) DaB 1989-11-82 1975-86-84	e"; + Gender Female	+	 NetWorthInWillions

3. Next, suppose that out of the remaining female actors in our database, we want to delete the top three actresses by net worth. We can accomplish that by using the **ORDER BY** and **LIMIT** clauses.

DELETE FROM Actors ORDER BY NetWorthInMillions DESC LIMIT 3;

10	FirstNone	SecondNane	Dag	Gender	MoritalStatus	NetMorthInMillions
2	Jennifer	Aniston	1968-11-02	Female	Single	248
3		Lolic				129
1		Jenner				1220
8	Kir	Kandashian	1982-10-21	Female	Married	378
	s in set (0.) • JELETE FRO		K BY NotMorth	InMillions	t besk limit 3;	
rysql: lucry	DELETE FRO	V Actors CRUE offected (0.0		inMillions	DESC LIMIT 3;	
rysql: lucry	UELETE HKS OK, 3 nows SELECT * F	W Actors ORDER affected (0.0 RDM Actors:		, , ,		 NotMorthIrMillions

1 row in set (0.00 sec)

The above query removes the top three actresses by net worth.

4. We can also remove all the rows from a table using the following query:

```
mysql> SELECT * FROM Actors;

| Id | Firsthame | SecondName | DoB | | Gender | MaritalStatus | NetWorthInMillions |
| 3 | Angelina | Ialie | 1875-06-04 | Female | Single | 180 |
| row in set (0.00 sec)

mysql> DELETE FROM Actors;
| Duery OK, 1 row affected (0.00 sec)

mysql> SELECT * FROM Actors;
| Empty set (0.00 sec)
```

Notice that the table can still be queried even after we have removed all the rows from it.