

Multi-Table Update

This lesson shows how we can update several tables at the same time.

Multi-Table Update

We have an equivalent of updating multiple tables just as we can delete from multiple tables.

Syntax

```
UPDATE T1, T2

SET col1 = newVal1, col2 = newVal2

WHERE <condition1>
```

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/37lesson.sh` and wait for the MySQL prompt to start-up.

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

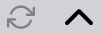


```
-- Query 1
UPDATE
Actors INNER JOIN DigitalAssets
ON Id = ActorId
SET FirstName = UPPER(FirstName), SecondName = UPPER(SecondName), URL = UPPER(URL)
WHERE AssetType = "Facebook";
```

```
-- Query 2
UPDATE Actors, DigitalAssets
SET FirstName = UPPER(FirstName), SecondName = UPPER(SecondName), URL = UPPER(URL)
```

```
WHERE AssetType = "Facebook"  
AND ActorId = Id;
```

Terminal



1. Let's say we want to write an update query that converts the FirstName and SecondName strings stored in the **Actors** table to upper case for those actors who are on Facebook, and at the same time we also want to convert the associated Facebook URL to uppercase. We can update rows in both the tables using a multi update query as follows:

```
UPDATE  
Actors INNER JOIN DigitalAssets  
ON Id = ActorId  
SET FirstName = UPPER(FirstName), SecondName = UPPER(SecondName),  
    URL = UPPER(URL)  
WHERE AssetType = "Facebook";
```

```
mysql> UPDATE
  -> Actors INNER JOIN DigitalAssets
  -> ON Id = ActorId
  -> SET FirstName = UPPER(FirstName), SecondName = UPPER(SecondName), URL = UPPER(URL)
  -> WHERE AssetType = "Facebook";
Query OK, 10 rows affected (0.00 sec)
Rows matched: 10  Changed: 10  Warnings: 0

mysql> SELECT * FROM Actors;
+-----+-----+-----+-----+-----+-----+-----+
| Id | FirstName | SecondName | DoB          | Gender | MaritalStatus | NetWorthInMillions |
+-----+-----+-----+-----+-----+-----+-----+
| 1 | Brad      | Pitt       | 1963-12-18   | Male   | Single        | 240                |
| 2 | JENNIFER  | ANISTON    | 1969-11-02   | Female | Single        | 240                |
| 3 | Angelina  | Jolie      | 1975-06-04   | Female | Single        | 100                |
| 4 | Johnny    | Depp       | 1963-06-09   | Male   | Single        | 200                |
| 5 | NATALIE   | PORTMAN    | 1981-06-09   | Male   | Married       | 60                 |
| 6 | TOM       | CRUISE     | 1962-07-03   | Male   | Divorced      | 570                |
| 7 | Kylie     | Jenner     | 1997-08-10   | Female | Married       | 1000               |
| 8 | KIM       | KARDASHIAN | 1980-10-21   | Female | Married       | 370                |
| 9 | Amitabh   | Bachchan   | 1942-10-11   | Male   | Married       | 400                |
| 10 | SHAHRUKH | KHAN       | 1965-11-02   | Male   | Married       | 600                |
| 11 | priyanka  | Chopra     | 1982-07-18   | Female | Married       | 28                 |
+-----+-----+-----+-----+-----+-----+-----+
11 rows in set (0.00 sec)

mysql> SELECT * FROM DigitalAssets;
+-----+-----+-----+-----+-----+
| URL                                     | AssetType | LastUpdatedOn          | ActorId |
+-----+-----+-----+-----+-----+
| http://jennifer-aniston.org            | Website   | 2019-10-11 23:14:05    | 2       |
| http://www.angelina-jolie.com          | Website   | 2019-05-01 12:54:02    | 3       |
| http://www.tomcruise.com              | Website   | 2019-10-23 09:56:33    | 6       |
| https://twitter.com/iamsrk             | Twitter   | 2019-08-18 18:39:08    | 10      |
| https://twitter.com/jenniferanniston   | Twitter   | 2019-02-13 03:04:25    | 2       |
| https://twitter.com/joliestweet        | Twitter   | 2019-02-03 00:04:25    | 3       |
| https://twitter.com/KimKardashian      | Twitter   | 2019-08-28 22:19:33    | 8       |
| https://twitter.com/natpdotcom         | Twitter   | 2019-06-09 10:12:21    | 5       |
| https://twitter.com/TomCruise         | Twitter   | 2018-07-05 06:16:12    | 6       |
| https://www.bradpittweb.com            | Website   | 2020-01-01 23:12:13    | 1       |
| HTTPS://WWW.FACEBOOK.COM/IAMSRK        | Facebook  | 2019-12-28 10:03:26    | 10      |
| HTTPS://WWW.FACEBOOK.COM/JENNIFERANISTON | Facebook  | 2019-12-28 10:03:26    | 2       |
| https://www.facebook.com/JohnChristopherOfficial | Website   | 2018-07-11 17:17:18    | 4       |
| HTTPS://WWW.FACEBOOK.COM/KIMKARDASHIAN | Facebook  | 2019-12-28 10:03:26    | 8       |
| HTTPS://WWW.FACEBOOK.COM/NATALIEPORTMANDOTCOM | Facebook  | 2019-12-28 10:03:26    | 5       |
| HTTPS://WWW.FACEBOOK.COM/OFFICIALTOMCRUISE | Facebook  | 2019-12-28 10:03:26    | 6       |
| https://www.instagram.com/bradpittofficial | Instagram | 2019-05-15 16:25:02    | 1       |
| https://www.kkwbeauty.com              | Website   | 2018-03-15 13:25:00    | 8       |
| https://www.natalieportman.com         | Website   | 2018-11-24 15:06:59    | 5       |
| https://www.pinterest.com/angelinajolie5601 | Pinterest | 2019-06-04 03:44:36    | 3       |
| https://www.pinterest.com/natalieportmandotcom | Pinterest | 2019-06-09 09:14:20    | 5       |
+-----+-----+-----+-----+-----+
21 rows in set (0.00 sec)
```

We performed an inner join to find those actors with Facebook presence. The matching rows from both the tables get updated as observed in the screen-shot. Instead of using an inner join, we can write the same query using the WHERE clause as follows:

```
UPDATE Actors, DigitalAssets
SET FirstName = UPPER(FirstName), SecondName = UPPER(SecondName),
    URL = UPPER(URL)
WHERE AssetType = "Facebook"
AND ActorId = Id;
```

2. Similarly to multi delete, we can't update a table that is also being read from in a subquery.
3. **ORDER BY** and **LIMIT** clauses can't be used with multi table deletes.