

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.

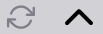


```
-- Query 1
UPDATE
Actors INNER JOIN DigitalAssets
ON Id = ActorId
SET FirstName = UPPER(FirstName), SecondName = UPPER(SecondName), URL = UPPER(URL)
WHERE AssetType = "Facebook";
```

```
-- 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	180
4	Johnny	Dapp	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	SHAHKUH	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/jenniferaniston	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.kksbeauty.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/angelinajolie5801	Pinterest	2019-06-04 03:44:26	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.