

6.2

The Subquery in an UPDATE statement

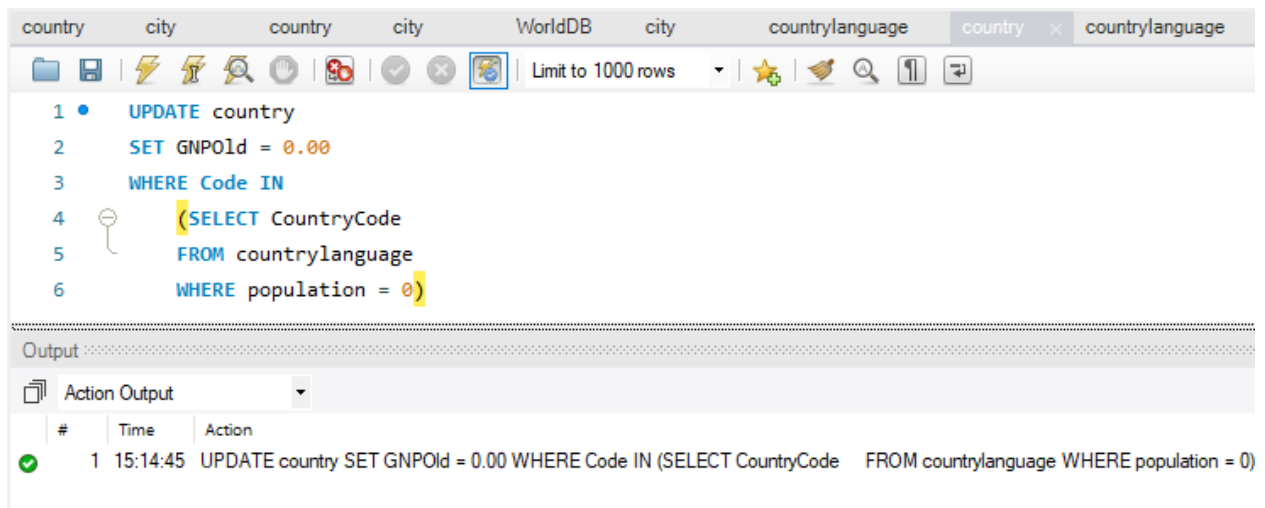
The Subquery in an UPDATE statement

- Subqueries may be used in an UPDATE statement
- Since it is possible to change many values at once with a subquery, take special care before running an UPDATE statement with a subquery. You might make a copy of the table and data you are trying to change to test with before running your statement on live data.
- It is also possible to run your UPDATE statement inside of a transaction block that allows you to ROLLBACK or undo a statement. We will address the topic of ROLLBACK in a future lesson.

Code Sample:

```
1 UPDATE country
2 SET GNPold = 0.00
3 WHERE Code IN
4 (SELECT CountryCode FROM countrylanguage WHERE population = 0)
```

Results:



The screenshot shows a MySQL database interface with a query editor and an output window. The query editor contains the following SQL statement:

```
1 UPDATE country
2 SET GNPold = 0.00
3 WHERE Code IN
4 (SELECT CountryCode
5 FROM countrylanguage
6 WHERE population = 0)
```

The output window shows the execution results:

#	Time	Action
✓ 1	15:14:45	UPDATE country SET GNPold = 0.00 WHERE Code IN (SELECT CountryCode FROM countrylanguage WHERE population = 0)

UPDATE country

- Update the country table

SET GNPOld = 0.00

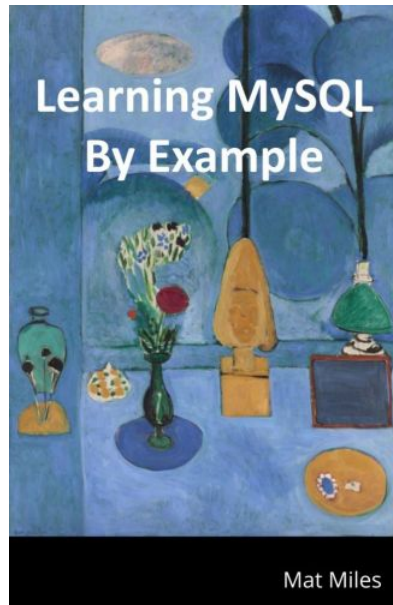
- Set the value of the GNPOld table = 0.00.
- No quotes are required because the GNPOld column is a decimal datatype

WHERE Code IN

- Update only the rows where the Code column value is in the results list returned in the subquery show below.

(SELECT CountryCode FROM countrylanguage WHERE population = 0)

- Return a list of values from the CountryCode column from the countrylanguage table that has a population equal to zero.
- If these values match a code in the country table, the row is updated.



Miles, M. (2021). *Learning MySQL By Example*. EdTech Books.
https://edtechbooks.org/learning_mysql