

## 6.2

# The Subquery in an UPDATE statement

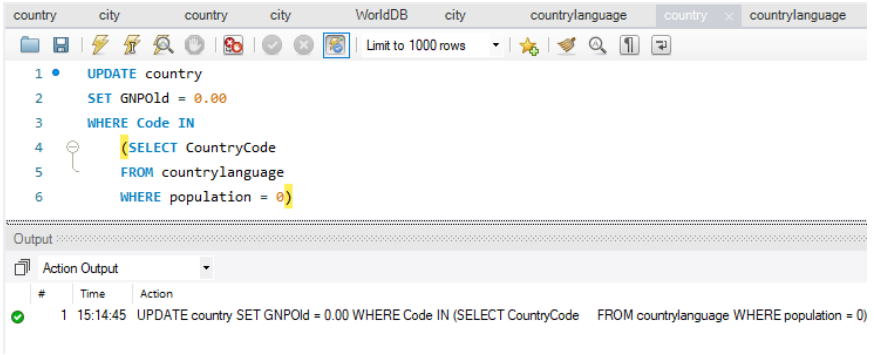
### The Subquery in an UPDATE statement

- 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 IDE window with several tabs: 'country', 'city', 'WorldDB', 'countrylanguage', and another 'country' and 'countrylanguage' tab. The SQL editor contains the following code:

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

Below the editor is an 'Output' section with a dropdown menu set to 'Action Output'. It displays the following execution result:

#	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

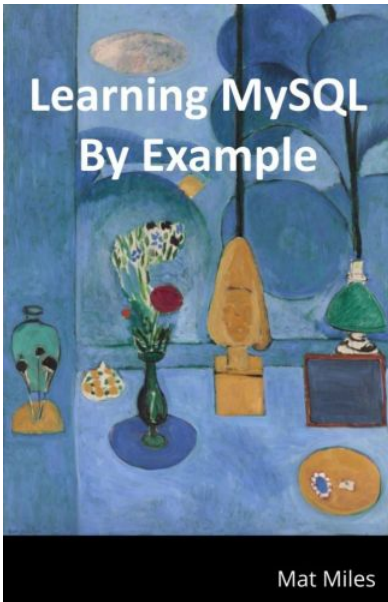
- Set the value of the GNPold table = 0.00.
- No quotes are required because the GNPold column is a decimal datatype

## 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](https://edtechbooks.org/learning_mysql)