

Unit Tests

This is the table from the database that I will use to do the unit tests from:

Table	Action	Rows	Type	Collation	Size	Overhead
<input type="checkbox"/> city	★ Browse Structure Search Insert Empty Drop	4,079	InnoDB	utf8mb4_general_ci	512.0 KiB	-
<input type="checkbox"/> country	★ Browse Structure Search Insert Empty Drop	239	InnoDB	utf8mb4_general_ci	112.0 KiB	-
<input type="checkbox"/> countrylanguage	★ Browse Structure Search Insert Empty Drop	984	InnoDB	utf8mb4_general_ci	160.0 KiB	-
3 tables	Sum	5,302	InnoDB	utf8mb4_general_ci	784.0 KiB	0 B

Unit Test 1

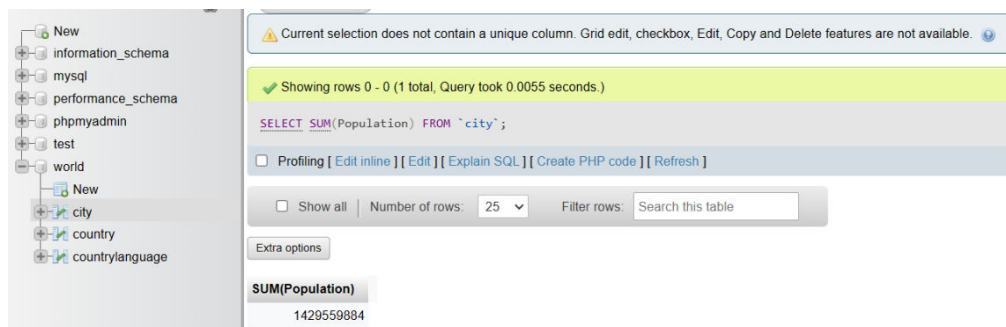
Name: Testing mathematical operations from the database using the sum function

From: World. SQL

Description: The first unit test I would do is to find the total number of population of people who lives in every city of each country.

Screenshots of testing

```
SELECT SUM(Population) FROM `city`;
```



Current selection does not contain a unique column. Grid edit, checkbox, Edit, Copy and Delete features are not available.

Showing rows 0 - 0 (1 total, Query took 0.0055 seconds.)

```
SELECT SUM(Population) FROM `city`;
```

Profiling [Edit inline] [Edit] [Explain SQL] [Create PHP code] [Refresh]

Show all | Number of rows: 25 | Filter rows: Search this table

Extra options

SUM(Population)

1429559884

Outcome: After I have completed the unit testing, I have found out the total population of people living in every city of each of the country from the database as the result was shown to be around 1.4 billion people.

Unit Test 2

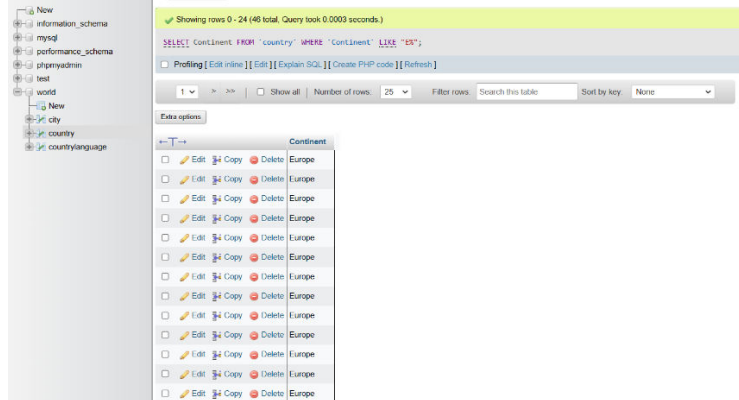
Name: Testing mathematical operations from the database using a special operator

From: World .SQL

Description: This unit test I would decide to do is to find the continent of the country in the world that is Europe that is only starting with the letter "E".

Screenshots of testing

```
SELECT * FROM `country`  
WHERE `Continent` LIKE "E%";
```



Outcome: After I have completed the unit testing, I have found out the continent of each country only contains Europe in the database, so it does not include other continents of each country that are Asia, North America, South America, Africa, and Oceania.

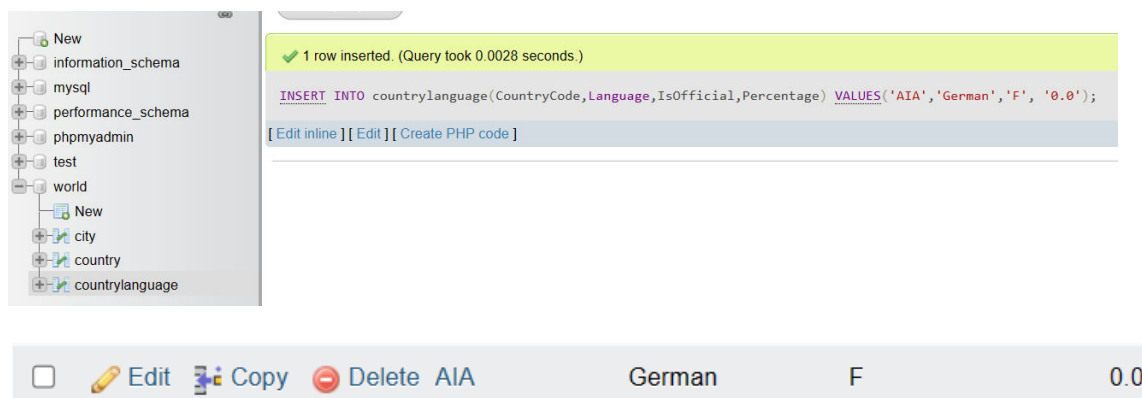
Unit Test 3

Name: To test database operations by inserting records in the database
From: World. SQL

Description: For this unit testing, I want to add a data to the database of the country Anguilla as the German language that is not official.

Screenshot of testing

```
1 INSERT INTO countrylanguage(CountryCode,Language,IsOfficial,Percentage)  
2 VALUES('AIA','German','F', '0.0');
```



Outcome: After I have completed this testing, I have found out that I have inserted a new record into the database that represents the country Anguilla as the country code, German as the

language which is not official, and it is a British territory, so no percentage of the people speak German only English.

Unit Test 4

Name: To test database operations by updating records in the database