

## IS NULL, BETWEEN, IN Operators

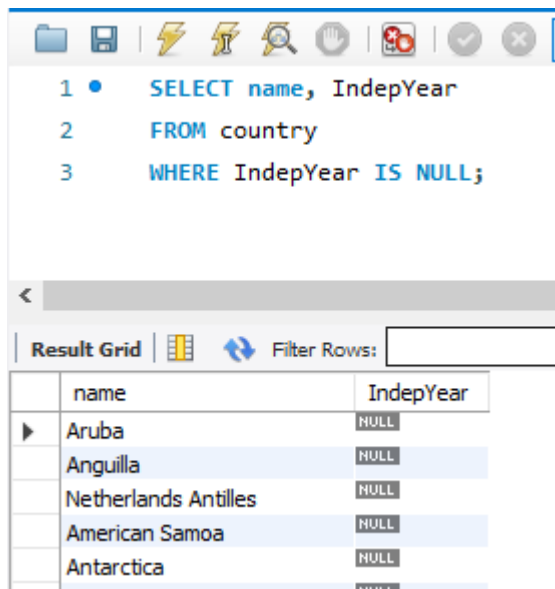
### IS NULL

- *Null values* indicate an unknown or non-existent value and is different from an empty string (' ').
- To test for a *null value* you use the IS NULL clause
- The test for a value use IS NOT NULL clause

Example:

```
SELECT name, IndepYear
FROM country
WHERE IndepYear IS NULL;
```

Results:



The screenshot shows a database query tool interface. At the top, there is a toolbar with icons for file operations, execution, and navigation. Below the toolbar, the SQL query is displayed in a text area, numbered 1 to 3. The query is: `SELECT name, IndepYear`, `FROM country`, `WHERE IndepYear IS NULL;`. Below the query, there is a "Result Grid" section. It contains a table with two columns: "name" and "IndepYear". The table lists several countries with their independence years, all of which are NULL.

name	IndepYear
Aruba	NULL
Anguilla	NULL
Netherlands Antilles	NULL
American Samoa	NULL
Antarctica	NULL

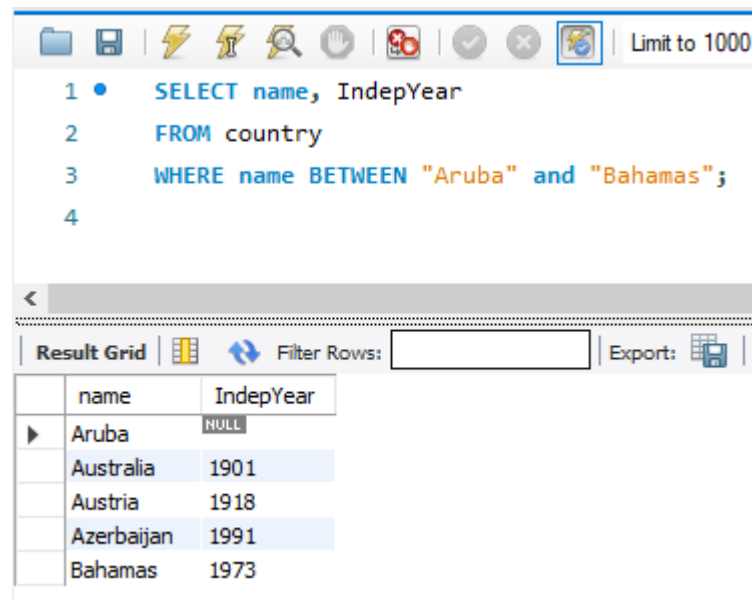
## BETWEEN Operators

- The BETWEEN operator is similar to  $\geq$  and  $\leq$ .
- BETWEEN includes everything between the two values indicated.
- BETWEEN works with both text and number.

*Example:*

```
USE world;
SELECT name, IndepYear
FROM country
WHERE name BETWEEN "Aruba" and "Bahamas";
```

*Results:*



The screenshot shows a database query tool interface. At the top, there is a toolbar with various icons and a 'Limit to 1000' button. Below the toolbar, the SQL query is displayed in a text area, numbered 1 through 4. Below the query, there is a 'Result Grid' section. It includes a 'Filter Rows' input field and an 'Export' button. The result grid itself is a table with two columns: 'name' and 'IndepYear'. The first row, 'Aruba', has a 'NULL' value in the 'IndepYear' column. The subsequent rows are 'Australia' (1901), 'Austria' (1918), 'Azerbaijan' (1991), and 'Bahamas' (1973).

	name	IndepYear
▶	Aruba	NULL
	Australia	1901
	Austria	1918
	Azerbaijan	1991
	Bahamas	1973

## The IN Keyword

- The IN clause tests whether an expression is equal to a value or values in a list of expressions.
- The order of the items in the list does not matter.
- You can use the NOT operator to test for items not in the list.
- The IN clause may be used with a subquery.

*Examples:*

```
USE world;
SELECT name
FROM country
WHERE name IN ('Aruba', 'Barbados', 'Cuba', 'Bahamas')
ORDER BY population ASC;
```

Results:

```
1 • USE world;
2 • SELECT name
3   FROM country
4   WHERE name IN ('Aruba', 'Barbados', 'Cuba', 'Bahamas')
5   ORDER BY population ASC;
```

Result Grid	Filter Rows:	Export:	Wrap Cell Content
name			
Aruba			
Barbados			
Bahamas			
Cuba			



This content is provided to you freely by BYU-I Books.

Access it online or download it at [https://books.byui.edu/learning\\_mysql/is\\_null\\_between\\_in\\_o](https://books.byui.edu/learning_mysql/is_null_between_in_o).

