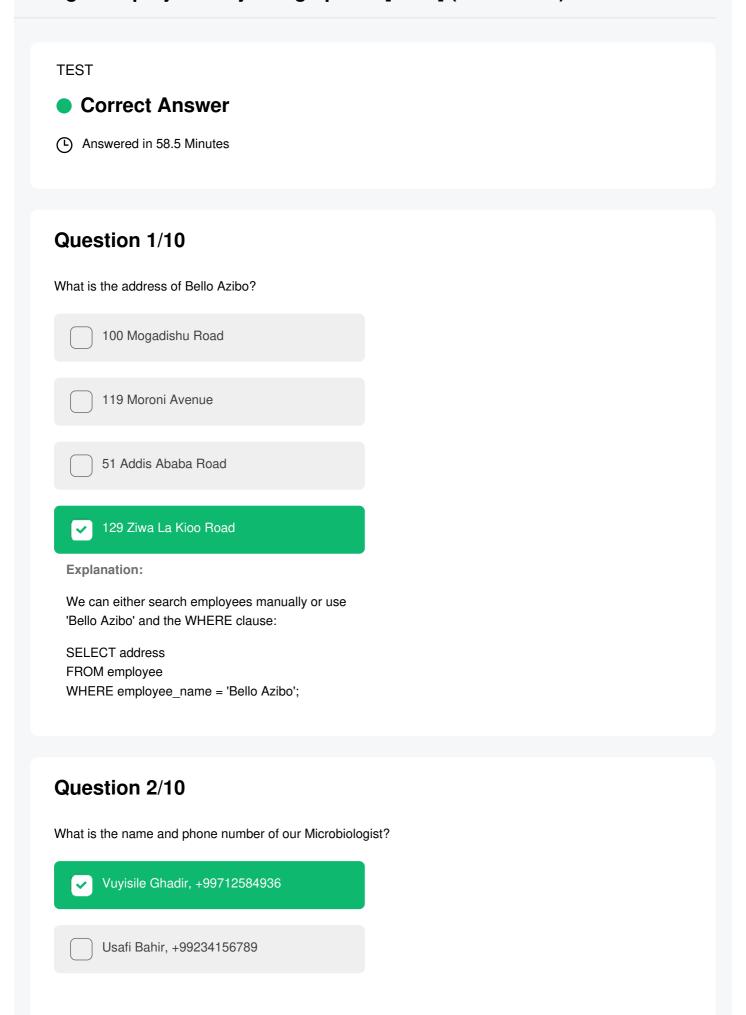
# Integrated project: Maji Ndogo part 1 [MCQ] (Version: 0)



## Question 3/10

What is the source\_id of the water source shared by the most number of people? Hint: Use a comparison operator.

What is the source_id of the water source shared by th operator.
AkRu04862224
AmAs10911224
✓ AkRu05603224
AkHa00036224
Explanation:
With our given experience and the hint given, we can either use > with some number to hone in on the answer:
051 50T *

SELECT \*

FROM water\_source

WHERE number\_of\_people\_served > 3997;

or sort the list to find the top record:

SELECT \*

FROM water\_source

ORDER BY number\_of\_people\_served DESC;

What is the population of Maji Ndogo?

ne word 'population'.

Hint: Start by searching the data_dictionary table for the		
27.6 million people		
27,628.1 people		
146 million people		
29.8 million people		
Explanation:		
Searching the data_dictionary for:		
SELECT * FROM data_dictionary WHERE description LIKE '%population%';		
Gives:		
column table_name description _name		
The national population size estimate in thousands		

The urban population share

global\_water\_access pop\_u estimate in

percentage points

(%)

From this we get the following information:

- 1. The population is in column pop\_n.
- 2. It is in the global\_water\_access table.
- 3. The unit is in the thousands.

Searching the global\_water\_access table:

SELECT \* FROM global\_water\_access WHERE name = 'Maji Ndogo';

## Question 5/10

Which SQL query returns records of employees who are **Civil Engineers** residing in **Dahabu** or living on an avenue?

#### **SELECT**\*

FROM employee

WHERE position = 'Civil Engineer' AND (province\_name = 'Dahabu' OR address LIKE '%Avenue%');

#### **SELECT** \*

FROM employee

WHERE (position = 'Civil Engineer' AND province\_name = 'Dahabu') OR address LIKE '%Avenue%';

# SELECT \* FROM employee WHERE position = 'Civil Engineer' AND province\_name = 'Dahabu' OR address LIKE '%Avenue%';

#### **Explanation:**

The order of operations will influence the output.

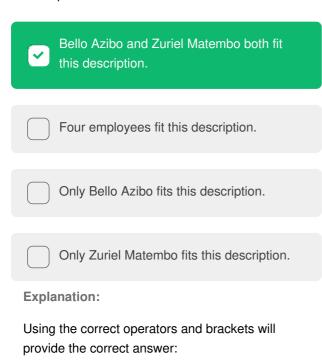
The option that doesn't include brackets is incorrect because it will include employees with positions other than 'Civil Engineer' as well. The option that includes the bracket before position and after 'Dahabu' is incorrect because it will similarly include employees with other positions. The option without %, indicating a wildcard, will return nothing and is therefore incorrect.

## Question 6/10

Create a query to identify potentially suspicious field workers based on an anonymous tip. This is the description we are given:

- The employee's phone number contained the digits 86 or 11.
- The employee's last name started with either an A or an M.
- The employee was a Field Surveyor.

Which option is correct?



SELECT employee\_name FROM employee

**WHERE** 

(phone\_number LIKE '%86%'
OR phone\_number LIKE '%11%')
AND (employee\_name LIKE '% A%'
OR employee\_name LIKE '% M%')
AND position = 'Field Surveyor';

Without the brackets, four employees will be found to match this description. Incorrectly applying the brackets, many employees will be found to match this description.

## Question 7/10

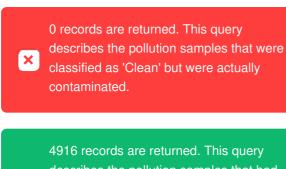
What is the result of the following query? Choose the most appropriate description of the results set.

SELECT \*

FROM well\_pollution

WHERE description LIKE 'Clean\_%' OR results = 'Clean' AND biological < 0.01;

4916 records are returned. This query describes the pollution samples that were classified as 'Clean' but were actually contaminated.



describes the pollution samples the			
	an insignificant amount of biological		
	contamination.		

4954 records are returned. This query
describes the pollution samples that had
an insignificant amount of biological
contamination.

### **Explanation:**

'4954 records' are incorrect because the changes made in **5. Pollution Issues** were not made, adding those records to the total rows.

'0 records' are incorrect because... This is the result of running the query we used to check the incorrect labels in message 13:13. The conditions in this question are reversed.

The statements that refer to 'classified as 'Clean' but were actually contaminated' are incorrect because this query describes the pollution samples where query conditions are reversed. Looking for biological < 0.01 means we're looking for records below the threshold of 0.01, meaning there is an insignificant amount of biological contamination in these samples. Check message 12:31 for more details.

## Question 8/10

Which query will identify the records with a quality score of 10, visited more than once?

SELECT \* FROM water\_quality WHERE

visit\_count >= 2 AND
subjective\_quality\_score = 10

SELECT \* FROM water\_quality WHERE

visit\_count = 2 OR

**UPDATE** employee

SET phone\_number = '+99643864786';

UPDATE employee
SET phone_number = +99643864786
WHERE employee_name = 'Bello Azibo';

#### **Explanation:**

The option that includes UPDATE, SET, and WHERE, quotation marks on the number, and uses employee\_name is correct. If the phone number is not wrapped in quotation marks, it will result in a syntax error.

If the WHERE clause is not used, this number will be set for all employee records rather than just for the single employee. If the column 'name' rather than 'employee\_name' is used, we are referring to a non-existent column.

## Question 10/10

How many rows of data are returned for the following query?

SELECT \*

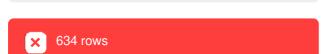
FROM well\_pollution

WHERE description

IN ('Parasite: Cryptosporidium', 'biologically contaminated')

OR (results = 'Clean' AND biological > 0.01);

750 rows	
5486 rows	





#### **Explanation:**

'634 rows' is incorrect because the changes made to the well\_pollution table were not successful. Either the updates were not made, or the well\_pollution\_copy table was updated, and not well\_pollution.

'0 rows' and '750 rows' are false options.

