WEATHER OBSERVATION STATION 5

TASK:

Query the two cities in **STATION** with the shortest and longest *CITY* names, as well as their respective lengths (i.e.: number of characters in the name). If there is more than one smallest or largest city, choose the one that comes first when ordered alphabetically. The **STATION** table is described as follows:

STATION

Field	Type
ID	NUMBER
CITY	VARCHAR2(21)
STATE	VARCHAR2(2)
LAT_N	NUMBER
LONG_W	NUMBER

where **LAT_N** is the northern latitude and **LONG_W** is the western longitude.

Sample Input

For example, **CITY** has four entries: **DEF, ABC, PQRS** and **WXY**.

Sample Output

ABC 3

PQRS 4

Explanation

When ordered alphabetically, the **CITY** names are listed as **ABC, DEF, PQRS,** and **WXY**, with lengths 3, 3, 4 and 3. The longest name is **PQRS**, but there are 3 options for shortest named city. Choose **ABC**, because it comes first alphabetically.
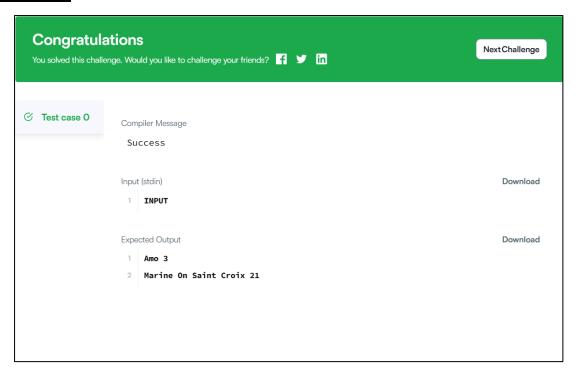
Note
You can write two separate queries to get the desired output. It need not be a single query.

SOLUTION:

```
(
SELECT CITY, CHAR_LENGTH(CITY) FROM STATION
ORDER BY CHAR_LENGTH(CITY), CITY
LIMIT 1
)
UNION
(
SELECT CITY, CHAR_LENGTH(CITY) FROM STATION
ORDER BY CHAR_LENGTH(CITY) DESC, CITY ASC
LIMIT 1
)
```

SUBMISSION:

Congratulations
You solved this challenge. Would you like to challenge your friends?

Next Challenge

⊘ **Test case 0**

Compiler Message
Success

Input (stdin)   Download
1   INPUT

Expected Output   Download
1   Amo 3
2   Marine On Saint Croix 21

CONCEPT USED:

CHAR_LENGTH: Returns the length of the string *str*, measured in code points. A multibyte character counts as a single code point.

If you need only a specified number of rows from a result set, use a LIMIT clause in the query, rather than fetching the whole result set and throwing away the extra data.

On character type columns, sorting—like all other comparison operations—is normally performed in a case-insensitive fashion. This means that the order is undefined for columns that are identical except for their case. You can force a casesensitive sort for a column by using BINARY like so: ORDER BY BINARY col_name.

The default sort order is ascending, with smallest values first. To sort in reverse (descending) order, add the DESC keyword to the name of the column you are sorting by.

UNION combines the result from multiple query blocks into a single result set.

SOURCES:

1. https://dev.mysql.com/doc/refman/9.3/en/string-functions.html#function_char-length
2. https://dev.mysql.com/doc/refman/9.3/en/limit-optimization.html
3. https://dev.mysql.com/doc/refman/9.3/en/sorting-rows.html
4. https://dev.mysql.com/doc/refman/9.3/en/union.html