SQL – 12/31/2019

1. 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.

**Input Format**

The **STATION** table is described as follows:

A close up of a street

Description automatically generated

where *LAT\_N* is the northern latitude and *LONG\_W* is the western longitude.

**Sample Input**

Let's say that *CITY* only 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 the respective lengths  and . The longest-named city is obviously *PQRS*, but there are  options for shortest-named city; we choose *ABC*, because it comes first alphabetically.

**Note**  
**code:**

**(SELECT CITY,LENGTH(CITY) cityLength FROM STATION ORDER BY cityLength ASC , CITY ASC LIMIT 1)**

**UNION ALL**

**(SELECT CITY,LENGTH(CITY) cityLength FROM STATION ORDER BY cityLength DESC , CITY ASC LIMIT 1)**

1. Query the list of CITY names starting with vowels (i.e., a, e, i, o, or u) from **STATION**. Your result cannot contain duplicates.

**Input Format**

The **STATION** table is described as follows:

A close up of a street

Description automatically generated

where LAT\_N is the northern latitude and LONG\_W is the western longitude.

**Code:**

**SELECT DISTINCT city FROM station WHERE city REGEXP "^[aeiou].\*";**

1. Query the list of CITY names from **STATION** that do not end with vowels. Your result cannot contain duplicates.

**Input Format**

The **STATION** table is described as follows:

A close up of a street

Description automatically generated

where LAT\_N is the northern latitude and LONG\_W is the western longitude.

**Code:**

**SELECT DISTINCT CITY FROM STATION WHERE CITY NOT REGEXP "[aeiou]$";**

1. Query the list of CITY names from **STATION** that do not BEGIN with vowels. Your result cannot contain duplicates.

**Input Format**

The **STATION** table is described as follows:

A close up of a street

Description automatically generated

where LAT\_N is the northern latitude and LONG\_W is the western longitude.

**Code:**

**SELECT DISTINCT CITY FROM STATION WHERE CITY NOT REGEXP "^[aeiou].\*";**