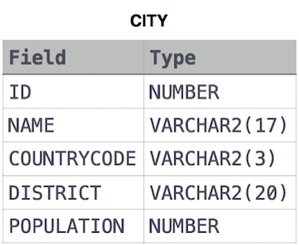
Hacker Rank:

**1 Query**:

Query all columns for all American cities in the **CITY** table with populations larger than 100000. The **CountryCode** for America is USA.

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



**Solution:**

select \* from CITY

where POPULATION > 100000

and COUNTRYCODE = "USA";

**2 Query**:

Find the difference between the total number of **CITY** entries in the table and the number of distinct **CITY** entries in the table.  
The **STATION** table is described as follows:

Table

Description automatically generated

For example, if there are three records in the table with **CITY** values 'New York', 'New York', 'Bengalaru', there are 2 different city names: 'New York' and 'Bengalaru'. The query returns 1, because, total number of records-number of unique city names = 1

**Solution:**

select count(CITY) - count(distinct CITY) as diff\_count

from STATION;

**3 Query:**

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:

Table

Description automatically generated

**Solution:**

**select CITY,LENGTH(CITY) from STATION order by Length(CITY) asc, CITY limit 1;**

**select CITY,LENGTH(CITY) from STATION order by Length(CITY) desc, CITY limit 1;**

**4 Query:**

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

**Solution:**

**select distinct city from station where city like "a%" or city like "e%" or city like "i%" or city like "o%" or city like "u%";**

**SELECT DISTINCT CITY FROM STATION WHERE CITY REGEXP '^[aeiou]';**

**5 Query:**

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

**Solution:**

**SELECT DISTINCT CITY FROM STATION WHERE CITY REGEXP '[aeiou]$';**

**6 Query:**

Query the list of *CITY* names from **STATION** which have vowels (i.e., *a*, *e*, *i*, *o*, and *u*) as both their first *and* last characters. Your result cannot contain duplicates.

**Solution:**

**SELECT DISTINCT CITY FROM STATION WHERE CITY REGEXP '[aeiou]$' and CITY REGEXP '^[aeiou]' ;**

**7 Query:**

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

Solution:

select DISTINCT CITY from STATION where CITY REGEXP '^[^aeiou]';

**8 Query:**

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

**Solution:**

**select DISTINCT CITY from STATION where CITY regexp '[^aeiou]$';**

**9 Query:**

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

Solution:

**SELECT DISTINCT CITY FROM STATION WHERE CITY REGEXP '^[^AEIOU].\*[^AEIOU]$';**

**10 Query:**

Query the *Name* of any student in **STUDENTS** who scored higher than 75 *Marks*. Order your output by the *last three characters* of each name. If two or more students both have names ending in the same last three characters (i.e.: Bobby, Robby, etc.), secondary sort them by ascending *ID*.

Solution:

select Name from STUDENTS

where Marks > 75

order by right(name,3) , ID asc;

**11 Query:**

Write a query that prints a list of employee names (i.e.: the *name* attribute) from the **Employee** table in alphabetical order.

Solution:

select name from Employee order by name;

**12 Query:**

Write a query that prints a list of employee names (i.e.: the *name* attribute) for employees in **Employee** having a salary greater $2000 than  per month who have been employees for less than 10 months. Sort your result by ascending *employee\_id*.

Solution:

select name from Employee

where salary > 2000 and months < 10;