SQL:

CITY

Field	Type
ID	NUMBER
NAME	VARCHAR2(17)
COUNTRYCODE	VARCHAR2(3)
DISTRICT	VARCHAR2(20)
POPULATION	NUMBER

- Query all columns for all American cities in CITY with populations larger than 100,000. The CountryCode for America is USA.

SELECT * FROM CITY WHERE COUNTRYCODE = 'USA' AND POPULATION > 100000;

- Query the names of all American cities in CITY with populations larger than 120,000. The CountryCode for America is USA.

SELECT NAME FROM CITY WHERE COUNTRYCODE = 'USA' AND POPULATION > 120000;

- Query all columns for every row in the CITY table.

SELECT * FROM CITY;

- Query all columns for a city in CITY with the ID 1661.

SELECT * FROM CITY WHERE ID = 1661;

- Query the details for all the Japanese cities in CITY. The COUNTRYCODE for Japan is JPN.

SELECT * FROM CITY WHERE COUNTRYCODE = 'JPN';

- Query the the names of all the Japanese cities in CITY. The COUNTRYCODE for Japan is JPN.

SELECT NAME FROM CITY WHERE COUNTRYCODE = 'JPN';

STATION

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

- Query a list of CITY and STATE from STATION.

SELECT CITY,STATE FROM STATION;

- Query a list of CITY names from STATION with even ID numbers only. You may print the results in any order, but must exclude duplicates from your answer.

SELECT DISTINCT CITY FROM STATION WHERE MOD(ID,2)=0 ORDER BY CITY ASC;

- Let NUM be the number of CITY entries in STATION, and NUMunique be the number of unique cities. Query the value of NUM−NUMunique from STATION.

  In other words, query the number of non-unique CITY names in STATION by subtracting the number of unique CITY entries in the table from the total number of CITY entries in the table.

SELECT COUNT(CITY) - COUNT(DISTINCT CITY) FROM STATION;

- 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.

select city, length(city) from station order by length(city) DESC,city ASC fetch first row only;

select city, length(city) from station order by length(city) asc ,city asc fetch first row only;

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

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%' ORDER BY CITY ASC;

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

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';

- 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.

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%') AND (CITY LIKE '%a' OR CITY LIKE '%e' OR CITY LIKE '%i' OR CITY LIKE '%o' OR CITY LIKE '%u') order by city;

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

SELECT DISTINCT CITY FROM STATION WHERE upper(SUBSTR(CITY,1,1)) NOT IN ('A','E','I','O','U') AND lower(SUBSTR(CITY,1,1)) NOT IN ('a','e','i','o','u');

- 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.

SELECT DISTINCT CITY FROM STATION WHERE LOWER(SUBSTR(CITY,1,1)) NOT IN ('a','e','i','o','u') OR LOWER(SUBSTR(CITY, LENGTH(CITY),1)) NOT IN ('a','e','i','o','u');