Problem 1 (Employee Names)

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

****Input Format****

The ****Employee**** table containing employee data for a company is described as follows:



where employee\_id is an employee's ID number, name is their name, months is the total number of months they've been working for the company, and salary is their monthly salary.

****Sample Input****



****Sample Output****

Angela

Bonnie

Frank

Joe

Kimberly

Lisa

Michael

Patrick

Rose

Todd

Problem 2 (Revising the select query 1)

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:



Problem 3 (Revising the select query 2)

Query the ****NAME**** field for all American cities in the ****CITY**** table with populations larger than 120000. The CountryCode for America is USA.

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


Problem 4 (Select All)

Query all columns (attributes) for every row in the ****CITY**** table.

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


Problem 5 (Select By Id)

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

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


Problem 6 (Japanese Cities’ Attributes)

Query all attributes of every Japanese city in the ****CITY**** table. The ****COUNTRYCODE**** for Japan is JPN.

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


Problem 7 (Japanese Cities’ Names)

Query the names of all the Japanese cities in the ****CITY**** table. The ****COUNTRYCODE**** for Japan is JPN.  
The ****CITY**** table is described as follows:  


Problem 8 (Weather Observation Station 1)

Query a list of ****CITY**** and ****STATE**** from the ****STATION**** table.  
The ****STATION**** table is described as follows:  


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

Problem 9 (Weather Observation Station 2)

Query the following two values from the ****STATION**** table:

1. The sum of all values in LAT\_N rounded to a scale of  decimal places.
2. The sum of all values in LONG\_W rounded to a scale of  decimal places.

****Input Format****

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



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

Problem 10 (Weather Observation Station 3)

Query a list of ****CITY**** names from ****STATION**** for cities that have an even ****ID**** number. Print the results in any order, but exclude duplicates from the answer.  
The ****STATION**** table is described as follows:



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

Problem 11 (Weather Observation Station 4)

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:



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

Problem 12 (Weather Observation Station 5)

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:



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

Problem 13 (Weather Observation Station 6)

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:



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

Problem 14 (Weather Observation Station 7)

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

**Input Format**

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



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

Problem 15 (Weather Observation Station 8)

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.

**Input Format**

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



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