

The PADS



Generate the following two result sets:

1. Query an *alphabetically ordered* list of all names in **OCCUPATIONS**, immediately followed by the first letter of each profession as a parenthetical (i.e.: enclosed in parentheses). For example: **AnActorName(A)** , **ADoctorName(D)** , **AProfessorName(P)** , and **ASingerName(S)** .
2. Query the number of occurrences of each occupation in **OCCUPATIONS**. Sort the occurrences in *ascending order*, and output them in the following format:

There are a total of [occupation_count] [occupation]s.

where [occupation_count] is the number of occurrences of an occupation in **OCCUPATIONS** and [occupation] is the *lowercase* occupation name. If more than one *Occupation* has the same [occupation_count], they should be ordered alphabetically.

Note: There will be at least two entries in the table for each type of occupation.

Input Format

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

Column	Type
Name	String
Occupation	String

Occupation will only contain one of the following values: **Doctor**, **Professor**, **Singer** or **Actor**.

Sample Input

An **OCCUPATIONS** table that contains the following records:

Name	Occupation
Samantha	Doctor
Julia	Actor
Maria	Actor
Meera	Singer
Ashely	Professor
Ketty	Professor
Christeen	Professor
Jane	Actor
Jenny	Doctor
Priya	Singer

Sample Output

Ashely(P)
Christeen(P)
Jane(A)
Jenny(D)

Julia(A)
Ketty(P)
Maria(A)
Meera(S)
Priya(S)
Samantha(D)
There are a total of 2 doctors.
There are a total of 2 singers.
There are a total of 3 actors.
There are a total of 3 professors.

Explanation

The results of the first query are formatted to the problem description's specifications.

The results of the second query are ascendingly ordered first by number of names corresponding to each profession ($2 \leq 2 \leq 3 \leq 3$), and then alphabetically by profession (*doctor* \leq *singer*, and *actor* \leq *professor*).