* A [*median*](https://en.wikipedia.org/wiki/Median) is defined as a number separating the higher half of a data set from the lower half. Query the *median* of the *Northern Latitudes* (*LAT\_N*) from **STATION** and round your answer to  decimal places.

- select ROUND(MEDIAN(LAT\_N), 4) from STATION;

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

**Sample Input**

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



**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 (), and then alphabetically by profession (, and ).

- select NAME||'('||SUBSTR(Occupation,1,1)||')' from OCCUPATIONS order by NAME;

- select 'There are a total of '||count(OCCUPATION)||' '||LOWER(OCCUPATION)||'s.' from OCCUPATIONS

group by OCCUPATION order by count(OCCUPATION), OCCUPATION;

[Pivot](https://en.wikipedia.org/wiki/Pivot_table" \t "_blank) the Occupation column in **OCCUPATIONS** so that each Name is sorted alphabetically and displayed underneath its corresponding Occupation. The output column headers should be Doctor, Professor, Singer, and Actor, respectively.

**Note:** Print **NULL** when there are no more names corresponding to an occupation.

**Input Format**

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



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

**Sample Input**



**Sample Output**

Jenny Ashley Meera Jane Samantha Christeen Priya Julia NULL Ketty NULL Maria

**Explanation**

The first column is an alphabetically ordered list of Doctor names.  
The second column is an alphabetically ordered list of Professor names.  
The third column is an alphabetically ordered list of Singer names.  
The fourth column is an alphabetically ordered list of Actor names.  
The empty cell data for columns with less than the maximum number of names per occupation (in this case, the Professor and Actor columns) are filled with **NULL** values.

**Current Buffer** (saved locally, editable)

[Pivot](https://en.wikipedia.org/wiki/Pivot_table" \t "_blank) the Occupation column in **OCCUPATIONS** so that each Name is sorted alphabetically and displayed underneath its corresponding Occupation. The output column headers should be Doctor, Professor, Singer, and Actor, respectively.

**Note:** Print **NULL** when there are no more names corresponding to an occupation.

**Input Format**

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



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

**Sample Input**



**Sample Output**

Jenny Ashley Meera Jane Samantha Christeen Priya Julia NULL Ketty NULL Maria

**Explanation**

The first column is an alphabetically ordered list of Doctor names.  
The second column is an alphabetically ordered list of Professor names.  
The third column is an alphabetically ordered list of Singer names.  
The fourth column is an alphabetically ordered list of Actor names.  
The empty cell data for columns with less than the maximum number of names per occupation (in this case, the Professor and Actor columns) are filled with **NULL** values.

set @r1 = 0, @r2 = 0, @r3 = 0, @r4 = 0;

select min(Doctor), min(Professor), min(Singer), min(Actor) from

(

Select case when Occupation = 'Doctor' then @r1 := @r1 + 1

when Occupation = 'Professor' then @r2 := @r2 + 1

when Occupation = 'Singer' then @r3 := @r3 + 1

when Occupation = 'Actor' then @r4 := @r4 + 1 end as RowNumber,

case when Occupation = 'Doctor' then Name end as Doctor,

case when Occupation = 'Professor' then Name end as Professor,

case when Occupation = 'Singer' then Name end as Singer,

case when Occupation = 'Actor' then Name end as Actor

from Occupations

order by Name

)temp

group by RowNumber