Problem 1211: Queries Quality and Percentage

Problem Information

Difficulty: Easy
Acceptance Rate: 0.00%
Paid Only: No

Problem Description

Table:

Queries

+-------------+---------+ | Column Name | Type | +-------------+---------+ | query_name | varchar | | result | varchar | | position | int | | rating | int | +-------------+---------+ This table may have duplicate rows. This table contains information collected from some queries on a database. The

position

column has a value from

1

to

500

. The

rating

column has a value from

1

to

5

. Query with

rating

less than 3 is a poor query.

We define query

quality

as:

The average of the ratio between query rating and its position.

We also define

poor query percentage

as:

The percentage of all queries with rating less than 3.

Write a solution to find each

query_name

, the

quality

and

poor_query_percentage

.

Both

quality

and

poor_query_percentage

should be

rounded to 2 decimal places

.

Return the result table in

any order

.

The result format is in the following example.

Example 1:

Input:

Queries table: +------------+-------------------+----------+--------+ | query_name | result | position | rating | +------------+-------------------+----------+--------+ | Dog | Golden Retriever | 1 | 5 | | Dog | German Shepherd | 2 | 5 | | Dog | Mule | 200 | 1 | | Cat | Shirazi | 5 | 2 | | Cat | Siamese | 3 | 3 | | Cat | Sphynx | 7 | 4 | +------------+-------------------+----------+--------+

Output:

+------------+---------+----------------------+ | query_name | quality | poor_query_percentage | +------------+---------+----------------------+ | Dog | 2.50 | 33.33 | | Cat | 0.66 | 33.33 | +------------+---------+----------------------+

Explanation:

Dog queries quality is ((5 / 1) + (5 / 2) + (1 / 200)) / 3 = 2.50 Dog queries poor_ query_percentage is (1 / 3) * 100 = 33.33

Cat queries quality equals ((2 / 5) + (3 / 3) + (4 / 7)) / 3 = 0.66 Cat queries poor_ query_percentage is (1 / 3) * 100 = 33.33

Code Snippets

MySQL:

```
# Write your MySQL query statement below
```

MS SQL Server:

```
/* Write your T-SQL query statement below */
```

PostgreSQL:

```
-- Write your PostgreSQL query statement below
```

Oracle:

```
/* Write your PL/SQL query statement below */
```

Pandas:

```
import pandas as pd

def queries_stats(queries: pd.DataFrame) -> pd.DataFrame:
```

Solutions

MySQL Solution:

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