Problem 1211: Queries Quality and Percentage

Problem Information

Difficulty: Easy
Acceptance Rate: 51.11%
Paid Only: No
Tags: Database

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
```