3308. Find Top Performing Driver Premium

Medium Topics

SQL Schema > Pandas Schema >

Table: `Drivers`

```
+--------------+---------+
| Column Name  | Type    |
+--------------+---------+
| driver_id    | int     |
| name         | varchar |
| age          | int     |
| experience   | int     |
| accidents    | int     |
+--------------+---------+
(driver_id) is the unique key for this table.
Each row includes a driver's ID, their name, age, years of driving experience, and the number of accidents they've had.
```

Table: `Vehicles`

```
+--------------+---------+
| vehicle_id   | int     |
| driver_id    | int     |
| model        | varchar |
| fuel_type    | varchar |
| mileage      | int     |
+--------------+---------+
(vehicle_id, driver_id, fuel_type) is the unique key for this table.
Each row includes the vehicle's ID, the driver who operates it, the model, fuel type, and mileage.
```

Table: `Trips`

```
+--------------+---------+
| trip_id      | int     |
| vehicle_id   | int     |
| distance     | int     |
| duration     | int     |
| rating       | int     |
+--------------+---------+
(trip_id) is the unique key for this table.
Each row includes a trip's ID, the vehicle used, the distance covered (in miles), the trip duration (in minutes), and the passenger's rating (1–5).
```

Uber is analyzing drivers based on their trips. Write a solution to find the **top-performing driver** for **each fuel type** based on the following criteria:

1. A driver's performance is calculated as the **average rating** across all their trips. Average rating should be rounded to `2` decimal places.

2. If two drivers have the same average rating, the driver with the **longer total distance** traveled should be ranked higher.

3. If there is **still a tie**, choose the driver with the **fewest accidents**.

Return *the result table ordered by* `fuel_type` *in* **ascending** *order.*

The result format is in the following example.

Example:

> **Input:**
>
> `Drivers` table:
>
> ```
> +-----------+----------+-----+------------+-----------+
> | driver_id | name     | age | experience | accidents |
> +-----------+----------+-----+------------+-----------+
> | 1         | Alice    | 34  | 10         | 1         |
> | 2         | Bob      | 45  | 20         | 3         |
> | 3         | Charlie  | 28  | 5          | 0         |
> +-----------+----------+-----+------------+-----------+
> ```
>
> `Vehicles` table:
>
> ```
> +------------+-----------+---------+-----------+---------+
> | vehicle_id | driver_id | model   | fuel_type | mileage |
> +------------+-----------+---------+-----------+---------+
> | 100        | 1         | Sedan   | Gasoline  | 20000   |
> | 101        | 2         | SUV     | Electric  | 30000   |
> | 102        | 3         | Coupe   | Gasoline  | 15000   |
> +------------+-----------+---------+-----------+---------+
> ```
>
> `Trips` table:
>
> ```
> +---------+------------+----------+----------+--------+
> | trip_id | vehicle_id | distance | duration | rating |
> +---------+------------+----------+----------+--------+
> | 201     | 100        | 50       | 30       | 5      |
> | 202     | 100        | 30       | 20       | 4      |
> | 203     | 101        | 100      | 60       | 4      |
> | 204     | 101        | 80       | 50       | 5      |
> | 205     | 102        | 40       | 30       | 5      |
> | 206     | 102        | 60       | 40       | 5      |
> +---------+------------+----------+----------+--------+
> ```
>
> **Output:**
>
> ```
> +-----------+-----------+--------+----------+
> | fuel_type | driver_id | rating | distance |
> +-----------+-----------+--------+----------+
> | Electric  | 2         | 4.50   | 180      |
> | Gasoline  | 3         | 5.00   | 100      |
> +-----------+-----------+--------+----------+
> ```
>
> **Explanation:**
>
> - For fuel type `Gasoline`, both Alice (Driver 1) and Charlie (Driver 3) have trips. Charlie has an average rating of 5.0, while Alice has 4.5. Therefore, Charlie is selected.
> - For fuel type `Electric`, Bob (Driver 2) is the only driver with an average rating of 4.5, so he is selected.
>
> The output table is ordered by `fuel_type` in ascending order.

Seen this question in a real interview before? 1/5

Yes No

Accepted 537 | Submissions 1K | Acceptance Rate 52.9%

Topics

Database

Discussion (1)