

Problem 3293: Calculate Product Final Price

Problem Information

Difficulty: **Medium**

Acceptance Rate: 79.51%

Paid Only: Yes

Tags: Database

Problem Description

Table: `Products`

+-----+-----+ | Column Name| Type | +-----+-----+ | product_id | int | | category | varchar | | price | decimal | +-----+-----+ product_id is the unique key for this table.
Each row includes the product's ID, its category, and its price.

Table: `Discounts`

+-----+-----+ | Column Name| Type | +-----+-----+ | category | varchar | | discount | int | +-----+-----+ category is the primary key for this table. Each row contains a product category and the percentage discount applied to that category (values range from 0 to 100).

Write a solution to find the **final price** of each product after applying the **category discount**. If a product's category has **no** **associated** **discount**, its price remains **unchanged**.

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

The result format is in the following example.

Example:

Input:

`Products` table:`

```

+-----+-----+-----+ | product_id | category | price | +-----+-----+-----+ | 1
| Electronics | 1000 | | 2 | Clothing | 50 | | 3 | Electronics | 1200 | | 4 | Home | 500 |
+-----+-----+-----+

```

`Discounts` table:

```

+-----+-----+ | category | discount | +-----+-----+ | Electronics| 10 | | Clothing |
20 | +-----+-----+

```

****Output:****

```

+-----+-----+-----+ | product_id | final_price| category |
+-----+-----+-----+ | 1 | 900 | Electronics | | 2 | 40 | Clothing | | 3 | 1080 |
Electronics | | 4 | 500 | Home | +-----+-----+-----+

```

****Explanation:****

* For product 1, it belongs to the Electronics category which has a 10% discount, so the final price is $1000 - (10\% \text{ of } 1000) = 900$. * For product 2, it belongs to the Clothing category which has a 20% discount, so the final price is $50 - (20\% \text{ of } 50) = 40$. * For product 3, it belongs to the Electronics category and receives a 10% discount, so the final price is $1200 - (10\% \text{ of } 1200) = 1080$. * For product 4, no discount is available for the Home category, so the final price remains 500.

Result table is ordered by product_id in ascending order.

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
```

