Problem 3050: Pizza Toppings Cost Analysis

Problem Information

Difficulty: Medium
Acceptance Rate: 67.93%
Paid Only: Yes
Tags: Database

Problem Description

Table: `Toppings`

+--------------+---------+ | Column Name | Type | +--------------+---------+ | topping_name | varchar | | cost | decimal | +--------------+---------+ topping_name is the primary key for this table. Each row of this table contains topping name and the cost of the topping.

Write a solution to calculate the **total cost** of **all possible`3`-topping** pizza combinations from a given list of toppings. The total cost of toppings must be **rounded** to `2` **decimal** places.

Note:

* **Do not** include the pizzas where a topping is **repeated**. For example, 'Pepperoni, Pepperoni, Onion Pizza'. * Toppings **must be** listed in **alphabetical order**. For example, 'Chicken, Onions, Sausage'. 'Onion, Sausage, Chicken' is not acceptable.

Return _the result table ordered by total cost in_ _**descending**_ _order and combination of toppings in**ascending** order._

The result format is in the following example.

Example 1:

Input: Toppings table: +--------------+------+ | topping_name | cost | +--------------+------+ | Pepperoni | 0.50 | | Sausage | 0.70 | | Chicken | 0.55 | | Extra Cheese | 0.40 | +--------------+------+ **Output:** +-------------------------------+------------+ | pizza | total_cost |

+-------------------------------+------------+ | Chicken,Pepperoni,Sausage | 1.75 | | Chicken,Extra Cheese,Sausage | 1.65 | | Extra Cheese,Pepperoni,Sausage | 1.60 | | Chicken,Extra Cheese,Pepperoni | 1.45 | +-------------------------------+------------+ **Explanation:** There are only four different combinations possible with the three topings: - Chicken, Pepperoni, Sausage: Total cost is $1.75 (Chicken $0.55, Pepperoni $0.50, Sausage $0.70). - Chicken, Extra Cheese, Sausage: Total cost is $1.65 (Chicken $0.55, Extra Cheese $0.40, Sausage $0.70). - Extra Cheese, Pepperoni, Sausage: Total cost is $1.60 (Extra Cheese $0.40, Pepperoni $0.50, Sausage $0.70). - Chicken, Extra Cheese, Pepperoni: Total cost is $1.45 (Chicken $0.55, Extra Cheese $0.40, Pepperoni $0.50). Output table is ordered by the total cost in descending 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
```