SQL Schema

Table: Products

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| Column Name | Type |

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| product\_id | int |

| store\_name1 | int |

| store\_name2 | int |

| : | int |

| : | int |

| : | int |

| store\_namen | int |

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product\_id is the primary key for this table.

Each row in this table indicates the product's price in n different stores.

If the product is not available in a store, the price will be null in that store's column.

The names of the stores may change from one testcase to another. There will be at least 1 store and at most 30 stores.

**Important note:** This problem targets those who have a good experience with SQL. If you are a beginner, we recommend that you skip it for now.

Implement the procedure UnpivotProducts to reorganize the Products table so that each row has the id of one product, the name of a store where it is sold, and its price in that store. If a product is not available in a store, do **not** include a row with that product\_id and store combination in the result table. There should be three columns: product\_id, store, and price.

The procedure should return the table after reorganizing it.

Return the result table in **any order**.

The query result format is in the following example.

**Example 1:**

**Input:**

Products table:

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| product\_id | LC\_Store | Nozama | Shop | Souq |

+------------+----------+--------+------+------+

| 1 | 100 | null | 110 | null |

| 2 | null | 200 | null | 190 |

| 3 | null | null | 1000 | 1900 |

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**Output:**

+------------+----------+-------+

| product\_id | store | price |

+------------+----------+-------+

| 1 | LC\_Store | 100 |

| 1 | Shop | 110 |

| 2 | Nozama | 200 |

| 2 | Souq | 190 |

| 3 | Shop | 1000 |

| 3 | Souq | 1900 |

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**Explanation:**

Product 1 is sold in LC\_Store and Shop with prices of 100 and 110 respectively.

Product 2 is sold in Nozama and Souq with prices of 200 and 190.

Product 3 is sold in Shop and Souq with prices of 1000 and 1900.