Table: Prices

```
+---------------+---------+
| Column Name   | Type    |
+---------------+---------+
| product_id    | int     |
| start_date    | date    |
| end_date      | date    |
| price         | int     |
+---------------+---------+
(product_id, start_date, end_date) is the primary key for this table.
Each row of this table indicates the price of the product_id in the period from start_date t
For each product_id there will be no two overlapping periods. That means there will be no tw
```

Table: UnitsSold

```
+---------------+---------+
| Column Name   | Type    |
+---------------+---------+
| product_id    | int     |
| purchase_date | date    |
| units         | int     |
+---------------+---------+
There is no primary key for this table, it may contain duplicates.
Each row of this table indicates the date, units, and product_id of each product sold.
```

Write an SQL query to find the average selling price for each product.
average_price should be **rounded to 2 decimal places**.

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

The query result format is in the following example.

Example 1:**

```
Input:
Prices table:
+------------+------------+------------+--------+
| product_id | start_date | end_date   | price  |
+------------+------------+------------+--------+
| 1          | 2019-02-17 | 2019-02-28 | 5      |
| 1          | 2019-03-01 | 2019-03-22 | 20     |
| 2          | 2019-02-01 | 2019-02-20 | 15     |
```

```
| 2          | 2019-02-21 | 2019-03-31 | 30     |
+------------+------------+------------+--------+
UnitsSold table:
+------------+---------------+-------+
| product_id | purchase_date | units |
+------------+---------------+-------+
| 1          | 2019-02-25    | 100   |
| 1          | 2019-03-01    | 15    |
| 2          | 2019-02-10    | 200   |
| 2          | 2019-03-22    | 30    |
+------------+---------------+-------+
Output:
+------------+---------------+
| product_id | average_price |
+------------+---------------+
| 1          | 6.96          |
| 2          | 16.96         |
+------------+---------------+
Explanation:
Average selling price = Total Price of Product / Number of products sold.
Average selling price for product 1 = ((100 * 5) + (15 * 20)) / 115 = 6.96
Average selling price for product 2 = ((200 * 15) + (30 * 30)) / 230 = 16.96
```