Table: Warehouse

```
+--------------+---------+
| Column Name  | Type    |
+--------------+---------+
| name         | varchar |
| product_id   | int     |
| units        | int     |
+--------------+---------+
(name, product_id) is the primary key for this table.
Each row of this table contains the information of the products in each warehouse.
```

Table: Products

```
+---------------+---------+
| Column Name   | Type    |
+---------------+---------+
| product_id    | int     |
| product_name  | varchar |
| Width         | int     |
| Length        | int     |
| Height        | int     |
+---------------+---------+
product_id is the primary key for this table.
Each row of this table contains information about the product dimensions (Width, Lenght, and
```

Write an SQL query to report the number of cubic feet of **volume** the inventory occupies in each warehouse.

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

The query result format is in the following example.

Example 1:**

```
Input:
Warehouse table:
+------------+--------------+-------------+
| name       | product_id   | units       |
+------------+--------------+-------------+
| LCHouse1   | 1            | 1           |
| LCHouse1   | 2            | 10          |
| LCHouse1   | 3            | 5           |
```

```
| LCHouse2   | 1            | 2           |
| LCHouse2   | 2            | 2           |
| LCHouse3   | 4            | 1           |
+------------+--------------+-------------+
```

Products table:

```
+------------+--------------+------------+----------+-----------+
| product_id | product_name | Width      | Length   | Height    |
+------------+--------------+------------+----------+-----------+
| 1          | LC-TV        | 5          | 50       | 40        |
| 2          | LC-KeyChain  | 5          | 5        | 5         |
| 3          | LC-Phone     | 2          | 10       | 10        |
| 4          | LC-T-Shirt   | 4          | 10       | 20        |
+------------+--------------+------------+----------+-----------+
```

Output:

```
+----------------+------------+
| warehouse_name | volume     |
+----------------+------------+
| LCHouse1       | 12250      |
| LCHouse2       | 20250      |
| LCHouse3       | 800        |
+----------------+------------+
```

Explanation:

```
Volume of product_id = 1 (LC-TV), 5x50x40 = 10000
Volume of product_id = 2 (LC-KeyChain), 5x5x5 = 125
Volume of product_id = 3 (LC-Phone), 2x10x10 = 200
Volume of product_id = 4 (LC-T-Shirt), 4x10x20 = 800
LCHouse1: 1 unit of LC-TV + 10 units of LC-KeyChain + 5 units of LC-Phone.
          Total volume: 1*10000 + 10*125  + 5*200 = 12250 cubic feet
LCHouse2: 2 units of LC-TV + 2 units of LC-KeyChain.
          Total volume: 2*10000 + 2*125 = 20250 cubic feet
LCHouse3: 1 unit of LC-T-Shirt.
          Total volume: 1*800 = 800 cubic feet.
```