03.Orders and Inventory in a Shop or Storage

You will receive **3 arrays** – one with **strings for the products**, one with **longs for the quantities** and one with **doubles for the prices**. The **prices** and **quantities** correspond to the **products** and are located on the **same indexes**.

Only the **arrays** containing the **products** and the array containing the **prices** will have the **same lengths**. If in the **quantities** array there is **no index** that **corresponds** to the **product** you should assume the quantity is **0**.

The product you receive after the arrays will contain **not only** a string for the **name** but also a **long** which is the **quantity** that must be **ordered**.

If you have **enough quantity**, calculate the total price by **multiplying** the ordered quantity **times** the **price** and **print it** in the following format:

`{product name} x {quantity ordered} costs {total price of the order}`

Format the price to the **2nd decimal place**. Do not forget to **decrease** the **quantity** of the product.

If you do **not** have **enough quantities** print:

`We do not have enough {product name}`

Input

- On the **first line**, you will receive array of **strings**, which represent the **names** of the products.
- On the **second line,** you will receive array of **longs**, which represent the **quantities** of the products.
- On the **third line,** you will receive array of **doubles**, which represent the **prices** of the products.
- On **every next line** until the line **Done,** you will receive a **product** (String) and **quantity** (long) that must be ordered.

Constraints

- The **name** and **price arrays** will **always** have the **same** length.
- You will **always** receive **existing** products

Examples

Input	Output
Bread Juice Fruits Lemons Beer **10 50 20 30** **2.34 1.23 3.42 1.50 3.00** Bread 10 Juice 5 Beer 20 Done	Bread x 10 costs 23.40 Juice x 5 costs 6.15 We do not have enough Beer
Tomatoes Onions Lemons **10000 2000** **5.40 3.20 2.20**	Tomatoes x 5000 costs 27000.00 Tomatoes x 5000 costs 27000.00 We do not have enough Tomatoes

Tomatoes 5000 Tomatoes 5000 Tomatoes 1 Done	