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.

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 5000 Tomatoes 5000 Tomatoes 1	Tomatoes x 5000 costs 27000.00 Tomatoes x 5000 costs 27000.00 We do not have enough Tomatoes

Done	