There is a sale in a supermarket, there will be a discount every n customer.  
There are some products in the supermarket where the id of the i-th product is products[i] and the price per unit of this product is prices[i].  
The system will count the number of customers and when the n-th customer arrive he/she will have a discount on the bill. (i.e if the cost is x the new cost is x - (discount \* x) / 100). Then the system will start counting customers again.  
The customer orders a certain amount of each product where product[i] is the id of the i-th product the customer ordered and amount[i] is the number of units the customer ordered of that product.

Implement the Cashier class:

* Cashier(int n, int discount, int[] products, int[] prices) Initializes the object with n, the discount, the products and their prices.
* double getBill(int[] product, int[] amount) returns the value of the bill and apply the discount if needed. Answers within 10^-5 of the actual value will be accepted as correct.

**Example 1:**

**Input**

["Cashier","getBill","getBill","getBill","getBill","getBill","getBill","getBill"]

[[3,50,[1,2,3,4,5,6,7],[100,200,300,400,300,200,100]],[[1,2],[1,2]],[[3,7],[10,10]],[[1,2,3,4,5,6,7],[1,1,1,1,1,1,1]],[[4],[10]],[[7,3],[10,10]],[[7,5,3,1,6,4,2],[10,10,10,9,9,9,7]],[[2,3,5],[5,3,2]]]

**Output**

[null,500.0,4000.0,800.0,4000.0,4000.0,7350.0,2500.0]

**Explanation**

Cashier cashier = new Cashier(3,50,[1,2,3,4,5,6,7],[100,200,300,400,300,200,100]);

cashier.getBill([1,2],[1,2]); // return 500.0, bill = 1 \* 100 + 2 \* 200 = 500.

cashier.getBill([3,7],[10,10]); // return 4000.0

cashier.getBill([1,2,3,4,5,6,7],[1,1,1,1,1,1,1]); // return 800.0, The bill was 1600.0 but as this is the third customer, he has a discount of 50% which means his bill is only 1600 - 1600 \* (50 / 100) = 800.

cashier.getBill([4],[10]); // return 4000.0

cashier.getBill([7,3],[10,10]); // return 4000.0

cashier.getBill([7,5,3,1,6,4,2],[10,10,10,9,9,9,7]); // return 7350.0, Bill was 14700.0 but as the system counted three more customers, he will have a 50% discount and the bill becomes 7350.0

cashier.getBill([2,3,5],[5,3,2]); // return 2500.0

**Constraints:**

* 1 <= n <= 10^4
* 0 <= discount <= 100
* 1 <= products.length <= 200
* 1 <= products[i] <= 200
* There are **not** repeated elements in the array products.
* prices.length == products.length
* 1 <= prices[i] <= 1000
* 1 <= product.length <= products.length
* product[i] exists in products.
* amount.length == product.length
* 1 <= amount[i] <= 1000
* At most 1000 calls will be made to getBill.
* Answers within 10^-5 of the actual value will be accepted as correct.