Total Expenses Problem Code: **FLOW009**

While purchasing certain items, a discount of 10% is offered if the quantity purchased is more than 1000.
If the quantity and price per item are input, write a program to calculate the total expenses.

Input

The first line contains an integer **T**, total number of test cases. Then follow **T** lines, each line contains integers **quantity** and **price**.

Output

Output the total expenses while purchasing items.

Constraints

- 1 ≤ **T** ≤ 1000
- 1 ≤ **quantity,price** ≤ 100000

Example

Input

```
3
100 120
10 20
1200 20
```

Output

```
12000.000000
200.000000
21600.000000
```