

Problem 2. Fuel (1 points)

Timelimit: 1sec

Problem Statement

Jongmin rented a car to have a trip from Pohang to Seoul. When you first start, the car will not have oil, thus you should charge oil at the Pohang. The size of the oil tank is unlimited, so you can put as much oil as you want. When traveling on the road, use 1 liters of oil every 1km (oops...). There is exactly one gas station in each city, and the price per liter of gas station in each city may be different.

Write a program that computes the minimum cost of moving from the departure to the destination city by taking as input the oil price of the gas station in each city and the length of the road connecting each city.

Input Statement

First line contains t which is the number of test cases.

At the first line of each test case contains the distance of path $D(\leq 10,000,000)$ and number of encountered cities before Seoul $n(\leq 1,000,000)$.

Each i -th line of following n lines contains two integers $d(\leq D), p(\leq 10,000,000)$ for the i -th city where d is distance from Pohang, and p is unit price of fuel.

The cities are sorted by increasing order of the distance from Pohang, and the departure Pohang is always a city on the path.

Output Statement

For each test case, print the minimum price to go to destination from Pohang to Seoul.

Dont forget that the correct answer can be a large number.

Input Example

```
2
3 3
0 3
1 2
2 1
100 3
0 3
19 7
27 100
```

Output Example

```
6
300
```

Implementation Hint

For C++ user, we highly recommend to use `scanf/printf` instead of `cin/cout`.