

# Audit Sale

After carefully auditing your portfolio, you notice you have  $N$  securities left over from previous trades. You have only one unit of each of these  $N$  securities, and you want to sell *at most*  $M$  of these to avoid extra accounting.

As an experienced portfolio manager, you rely on your previous body of work to predict the price at which you can sell each lone security. For each of the  $N$  securities, you write down two pieces of information:

1. The price,  $P$ , at which you want to sell that security.
2. The probability (or confidence),  $C$ , that you can sell the security at that price.

Thus, the  $i^{th}$  security has two values associated with it: the price,  $P_i$ , and the confidence,  $C_i$ . Drawing on your experience, you know with 100% certainty that you can sell at least  $K$  of the  $N$  securities.

Given the information discussed above, find the maximum amount of money **expected** from  $M$  sales, multiply it by 100, and print the result. The first  $K$  sales of your choice are guaranteed to be successful.

## Input Format

The first line contains three space-separated integers:  $N$  (the number of lone securities you have),  $M$  (the maximum number of securities you wish to sell), and  $K$  (the minimum number of securities you can definitely sell), respectively.

Each line  $i$  of the  $N$  subsequent lines contains two space-separated integers describing the respective  $P_i$  and  $C_i$  values for security  $i$  (where  $0 \leq i < N$ ).

## Constraints

- $1 \leq N \leq 10^5$
- $1 \leq M \leq N$
- $0 \leq K \leq M$
- $1 \leq P_i \leq 10^7$
- $0 \leq C_i \leq 100$

## Output Format

Print a single integer denoting the maximum amount of money expected from  $M$  sales, multiplied by 100.

## Sample Input

```
3 2 1
5 10
6 60
8 40
```

## Sample Output

```
1160
```

## Explanation

Here, you want to attempt  $M = 2$  sales and are **100%** confident you'll sell at least  $K = 1$  security. If you decide to attempt the last two sales (i.e.,  $\{(6, 60), (8, 40)\}$ ) and assume you definitely make the last one, your monetary *expectation* is given by:

$$\frac{(100 \times 8) + (60 \times 6)}{100} = \frac{1160}{100} = 11.6$$

If you attempt all other possibilities, you'll see that **11.6** is the maximum expected value. Thus, we multiply it by **100** and print the result (**1160**) on a new line.