Another Contest 1 Problem 3 - Poutine

Time limit: 0.5s **Memory limit:** 256M

Fast Fingers Thomas is eating poutine at Wilson's restaurant. Thomas has T dollars, and an order of poutine at Wilson's restaurant costs one dollar. Consequently, Thomas can place at most T orders of poutine.

There are N different types of poutine that Thomas can order. If Thomas orders poutine i for the first time, he gains a_i units of happiness. If Thomas orders poutine i for the kth time, he gains $\max(0, a_i - (k-1)b_i)$ units of happiness. Wilson will never run out of any type of poutine.

Compute the maximum amount of happiness Thomas can feel after eating some amount of poutine.

Constraints

$1 \leq N \leq 10^5$

$1 \leq a_i, b_i, T \leq 10^{18}$

Input Specification

The first line of input contains two positive integers, N and T.

Each of the next N lines contains two space-separated integers, a_i and b_i for poutine i.

Output Specification

Let g be the maximum attainable units of happiness that Thomas can feel. Output g modulo $998\,244\,353$.

Sample Input

```
2 3
8 2
7 2
```

Sample Output

```
21
```