2019/1/20 3111 -- K Best

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K Best

Language: Default 📀

Time Limit: 8000MS Memory Limit: 65536K

Total Submissions: 14539 Accepted: 3731

Case Time Limit: 2000MS Special Judge

## **Description**

Demy has n jewels. Each of her jewels has some value  $v_i$  and weight  $w_i$ .

Since her husband John got broke after recent financial crises, Demy has decided to sell some jewels. She has decided that she would keep k best jewels for herself. She decided to keep such jewels that their specific value is as large as possible. That is, denote the specific value of some set of jewels  $S = \{i_1, i_2, ..., i_k\}$  as

$$s(S) = \frac{\sum_{j=1}^{k} v_{i_j}}{\sum_{j=1}^{k} w_{i_j}}$$

Demy would like to select such k jewels that their specific value is maximal possible. Help her to do so.

## Input

The first line of the input file contains n — the number of jewels Demy got, and k — the number of jewels she would like to keep ( $1 \le k \le n \le 100\ 000$ ).

The following *n* lines contain two integer numbers each —  $v_i$  and  $w_i$  ( $0 \le v_i \le 10^6$ ,  $1 \le w_i \le 10^6$ , both the sum of all  $v_i$  and the sum of all  $w_i$  do not exceed  $10^7$ ).

#### **Output**

Output k numbers — the numbers of jewels Demy must keep. If there are several solutions, output any one.

## Sample Input

- 3 2
- 1 1
- 1 2
- 1 3

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# **Sample Output**

1 2

#### **Source**

Northeastern Europe 2005, Northern Subregion

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