

A. K-th Number in the Union of Segments

time limit per test: 0.5 seconds  
memory limit per test: 256 megabytes  
input: standard input  
output: standard output

→ Submit?

Language: GNU G++20 13.2 (64 bit, win

Choose file: Choose File No file chosen

Submit

Given  $n$  segments of integers  $[l_1, r_1], [l_2, r_2], \dots, [l_n, r_n]$ .

Let's write out all the numbers from these segments into an array. If some number contains in more than one segment, then it must appear so many times in the array, how many segments it contains. That is, the length of the array is equal to the sum the number of numbers in all segments.

After that, the array is sorted. Your task is to find the number at the position  $k$  (numbering starts from 0) in it.

**Input**

The first line contains integers  $n$  and  $k$  ( $1 \leq n \leq 50, 0 \leq k \leq 2 \cdot 10^9$ ). In the next  $n$  lines segments are given in the form of pairs  $l_i, r_i$  ( $-2 \cdot 10^9 \leq l_i \leq r_i \leq 2 \cdot 10^9$ ). It is guaranteed that the  $k$ -th number in the union exists.

**Output**

Print the required value.

input	Copy
2 4 1 3 5 7	
output	Copy
6	

input	Copy
2 3 1 4 3 5	
output	Copy
3	

input	Copy
1 1500000091 -1500000000 1500000000	
output	Copy
91	

