Luck Balance ☆

You have successfully solved Luck Balance

Sharo

Twee

×

Try the next challenge

Problem

Submissions

Leaderboard

Editorial

RATE THIS CHALLENGE

公公公公公

Lena is preparing for an important coding competition that is preceded by a number of sequential preliminary contests. Initially, her luck balance is 0. She believes in "saving luck", and wants to check her theory. Each contest is described by two integers, L[i] and T[i]:

- L[i] is the amount of luck associated with a contest. If Lena wins the contest, her luck balance will decrease by L[i]; if she loses it, her luck balance will increase by L[i].
- T[i] denotes the contest's importance rating. It's equal to 1 if the contest is important, and it's equal to 0 if it's unimportant.

If Lena loses no more than \boldsymbol{k} important contests, what is the maximum amount of luck she can have after competing in all the preliminary contests? This value may be negative.

For example, k = 2 and:

Contest	L[i]	T[i]
1	5	1
2	1	1
3	4	0

If Lena loses all of the contests, her will be 5+1+4=10. Since she is allowed to lose 2 important contests, and there are only 2 important contests. She can lose all three contests to maximize her luck at 10. If k=1, she has to win at least 1 of the 2 important contests. She would choose to win the lowest value important contest worth 1. Her final luck will be 5+4-1=8.

Function Description

Complete the luckBalance function in the editor below. It should return an integer that represents the maximum luck balance achievable.

luckBalance has the following parameter(s):

- k: the number of important contests Lena can lose
- contests: a 2D array of integers where each contests[i] contains two integers that represent the luck balance and importance of the ith contest.

Input Format

The first line contains two space-separated integers \boldsymbol{n} and \boldsymbol{k} , the number of preliminary contests and the maximum number of important contests Lena can lose.

Each of the next $m{n}$ lines contains two space-separated integers, $m{L}[m{i}]$ and $m{T}[m{i}]$, the contest's luck balance and its importance rating.

Constraints

- $1 \le n \le 100$
- $0 \le k \le N$
- $1 \le L[i] \le 10^4$
- $T[i] \in \{0,1\}$

Output Format

Print a single integer denoting the maximum amount of luck Lena can have after all the contests.



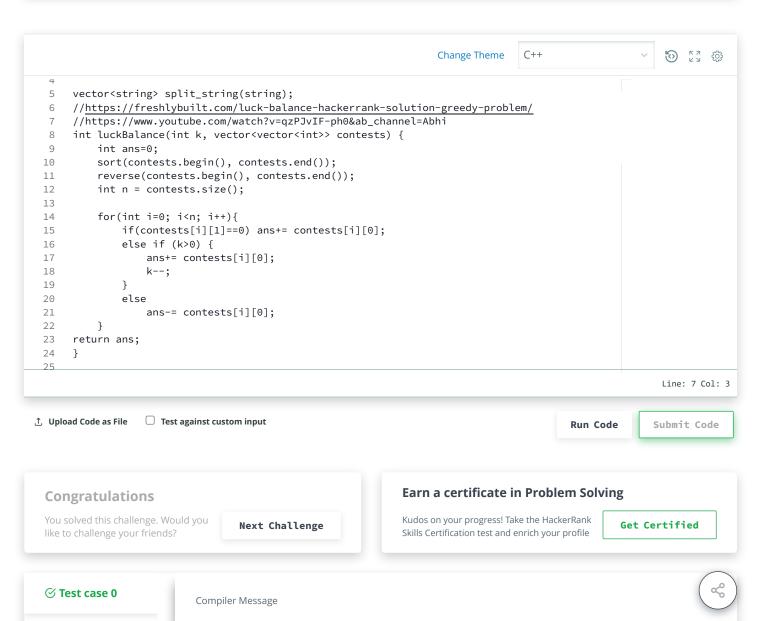
```
Sample Input

\begin{array}{c}
6 \ 3 \\
5 \ 1 \\
2 \ 1 \\
1 \ 1 \\
8 \ 1 \\
10 \ 0 \\
5 \ 0
\end{array}

Sample Output

\begin{array}{c}
29 \\
\text{Explanation}
\end{array}

There are n=6 contests. Of these contests, 4 are important and she cannot lose more than k=3 of them. Lena maximizes her luck if she wins the 3^{rd} important contest (where L[i]=1) and loses all of the other five contests for a total luck balance of 5+2+8+10+5-1=29.
```



⊘ Test case 6 △	Expe	cted Output	Download
	7	5 0	
⊗ Test case 4 🖰	6	10 0	
	5	8 1	
⊗ Test case 3	4	1 1	
	3	2 1	
	2	5 1	
	1	6 3	
⊗ Test case 2 🖰	Inpu	(stdin)	Download
⊗ Test case 1 🖰	Su	ccess	

Contest Calendar | Blog | Scoring | Environment | FAQ | About Us | Support | Careers | Terms Of Service | Privacy Policy | Request a Feature

