

Gotta Print'em all!

Problem	Submissions	Leaderboard	Discussions
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The computer lab in a university U has a single printer functioning. Due to high demands, the number of print commands that the printer receives is high. You can make the following assumptions:

- The printer is a single function printer i.e. it cannot do anything else except for printing
- The printer has the capability to know the number of pages it has to print for each and every command that it receives
- The printer can track the time at which it is receiving a command
- The time taken by each print command is 1 unit.
- In case the printer receives more than 1 command simultaneously, the priority will be given to the one with the least number of pages to print

The printer completes the commands in the increasing order of the number of pages it has to print.

Suppose the printer receives N print commands. The number of pages to be printed for each command is given as an array P having values $p_1, p_2 \dots p_n$. Also, there is another N sized array T , which denotes the times at which the command was received by the printer.

For a given integer k , ($k \leq N$) you have to count the total number of pages printed for the last k operations.

Input Format

The first line of the input contains 2 spaced integers, N and k
The next two lines contain N spaced integers denoting the arrays P and T respectively.

Constraints

$$1 \leq N \leq 10^6$$
$$1 \leq k \leq N$$
$$1 \leq p_i \leq 10000, \forall p_i \in P$$
$$1 \leq t_i \leq N, \forall t_i \in T$$

Output Format

A single line of output denoting the total number of pages printed in the last k operations

Sample Input 0

```
5 3
20 55 86 33 14
2 3 1 2 3
```

Sample Output 0

102

Explanation 0

The order of printing the pages will be: **86 20 14 33 55**

Explanation: At time instance 1, the printer receives 86 pages commands. Now, at time 2, it has options as 20 and 33. So it chooses 20 pages command. At time 3, it has 3 options, 55,33 and 14. So it chooses 14.

Finally, as no further commands are received, the printer processes the remaining in increasing order, i.e. 33 and 55 respectively.



As k=3, the sum of last 3 commands = 14+33+55 = 102



[f](#) [t](#) [in](#)

Submissions: 125
Max Score: 100
Difficulty: Medium

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Current Buffer (saved locally, editable)  


C++  

```
1 #include <cmath>
2 #include <cstdio>
3 #include <vector>
4 #include <iostream>
5 #include <algorithm>
6 using namespace std;
7
8
9 int main() {
10     /* Enter your code here. Read input from STDIN. Print output to STDOUT */
```

11
12
13

```
return 0;
```

Line: 1 Col: 1

 Upload Code as File

☐ Test against custom input

Run Code

Submit Code