Meow's Pizzeria

Input file:	`standard input`
Output file:	`standard output`
Time limit:	1 second
Memory limit:	256 megabytes

Meow has decided to open a pizzeria with his friend after the Movement Control Order (MCO) had been lifted by the government. Since they were still having difficulty hiring other workers , they have decided to deliver the pizzas themselves. Meow and his furend, Miau have decided to take turns delivering the pizzas and they have implemented a tip jar. Customers will tip the delivery man based on his service.

After a bit of discussion, it has been decided that Meow and Miau will deliver according to who will get more tip money from that respective delivery. They have also come to a consensus that all the orders would be distributed in a way where they are able to get more tips. One order will be handled by only one person.

Also, due to time constraints, Meow cannot take more than X orders and Miau cannot take more than Y orders. It is guaranteed that $X + Y$ is greater than or equal to the total number of orders received that day, which means that all the orders can be handled by either Meow or his friend. How much is the maximum possible value of tips that Meow's pizzeria can earn in total after processing all the orders?

Input

The first line contains 3 positive integers – N $(2 \leq N \leq 10^5)$, X, and Y –the number of orders, the maximum order Meow can take, the maximum order Miau can take, respectively. $(1 \leq X, Y \leq N; X + Y \geq N)$

The second line contains N integers $x_1, x_2, ..., x_n$ $(1 \leq x_i \leq 10^4)$ – the tip that Meow could possibly receive for order i.

The third line contains N integers $y_1, y_2, ..., y_n$ $(1 \leq y_i \leq 10^4)$ – the tip that Miau could possibly receive for order i.

Output

Print the maximum tip money they would receive.

Examples

standard input	standard output
5 3 3 1 2 3 4 5 5 4 3 2 1	21
5 1 4 5 4 3 100 5 1 1 1 1 1	104