Problem K. Electronics Shop

OS Linux

A person wants to determine the most expensive computer keyboard and USB drive that can be purchased with a give budget. Given price lists for keyboards and USB drives and a budget, find the cost to buy them. If it is not possible to buy *both* items, return -1.

Example
$b = 60$
$keyboards = [40, 50, 60]$
$drives = [5, 8, 12]$

The person can buy a $40 \text{ keyboard } + 12 \text{ USB drive } = 52$, or a $50 \text{ keyboard } + 8 \text{ USB drive } = 58$. Choose the latter as the more expensive option and return 58.

Function Description

Complete the *getMoneySpent* function in the editor below.

getMoneySpent has the following parameter(s):

- *int keyboards[n]*: the keyboard prices
- *int drives[m]*: the drive prices
- *int b*: the budget

Returns

- *int:* the maximum that can be spent, or -1 if it is not possible to buy both items

Input Format

The first line contains three space-separated integers b, n, and m, the budget, the number of keyboard models and the number of USB drive models.
The second line contains n space-separated integers $keyboard[i]$, the prices of each keyboard model.
The third line contains m space-separated integers $drives$, the prices of the USB drives.

Constraints

- $1 \leq n, m \leq 1000$
- $1 \leq b \leq 10^6$

- The price of each item is in the inclusive range $[1, 10^6]$.

Input	Output
10 2 3 3 1 5 2 8	9

Explanation 0

Buy the 2nd keyboard and the 3rd USB drive for a total cost of $8 + 1 = 9$.

Input	Output
5 1 1 4 5	-1

Explanation 1

There is no way to buy one keyboard and one USB drive because $4 + 5 > 5$, so return -1.