Problem B
Cooking Steaks

Morgan is a chef in a steak house. In his steak house, a steak can have N level of doneness, numbered from 1 to N. Currently, Morgan has A_i steaks of doneness level i ready in his steak house.

There are B_i orders of steaks with doneness level i that need to be fulfilled. Morgan can cook the steaks in order to match the doneness level. For each $1 \leq i < N$, it takes Morgan T_i seconds to cook a steak from doneness level i to $i + 1$. Note that Morgan can only cook one steak at a time.

Morgan asks for your help to find the minimum total time to fulfil all orders, or tell him that the orders are impossible to fulfil.

Input

Input begins with an integer N ($2 \leq N \leq 100\,000$). The next line contains $N - 1$ integers T_i ($1 \leq T_i \leq 1000$) representing the time required to cook a steak of doneness level i to $i+1$. The next line contains N integers A_i ($0 \leq A_i \leq 1000$) representing the number of steaks with doneness level i. The next line contains N integers B_i ($0 \leq B_i \leq 1000$) representing the number of orders for a steak with doneness level i.

Output

If all orders can be fulfilled, then output an integer in a single line representing the minimum total time to fulfil all orders. Otherwise, output `-1` in a single line.

Sample Input #1

```
3
1 2
2 2 3
0 1 5
```

Sample Output #1

```
5
```

Explanation for the sample input/output #1

First, Morgan can cook both steaks with doneness level 2 to level 3 in 2 seconds each. Then, Morgan can cook one steak with doneness level 1 to level 2 in 1 second. Now, Morgan has 1 steak of doneness level 1, 1 steak of doneness level 2, and 5 steaks of doneness level 3. It is enough to fulfil all orders. There is no other way to fulfil all orders in less than 5 seconds.

Sample Input #2

```
3
1 2
2 2 3
1 2 1
```

Sample Output #2

```
0
```

Explanation for the sample input/output #2

The steaks ready in his steak house can fulfil all orders without any further cooking.

Sample Input #3

```
3
1 2
2 2 3
5 0 0
```

Sample Output #3

```
-1
```

Explanation for the sample input/output #3

It is impossible to have 5 steaks of doneness level 1.