Problem B
Buying Mascots

Time limit: 1 second
Memory limit: 2048 megabytes

Problem Description

Brian is a fan of the double-sided octopus mascots. He visits a fair with n stands providing numerous octopus double-sided mascots to collect as many mascots as possible.

The stands in the fair are numbered from 1 to n, and Brian will also visit the stands in this order. When visiting the i-th stand, he can do exactly one of the following (but not both):

1. Pay a_i dollars to obtain a_i tokens. Brian can hold at most m tokens at a time. If Brian earns more than m at any time, the rest of the tokens must be returned to the stand.
2. Pay b_i tokens to obtain b_i double-sided octopus mascots.

At this moment, Brian has no tokens. What is the maximum number of double-sided octopus mascots he can receive after visiting the n stands? You may assume that Brian always has enough money to pay for the tokens.

Input Format

The first line of the input contains two integers n, m. The second line of the input contains n integers $a_1, a_2, \ldots, a_n$. The third line of the input contains n integers $b_1, b_2, \ldots, b_n$.

Output Format

Print the the maximum number of double-sided octopus mascots Brian can receive.

Technical Specification

- $1 \leq n \leq 10^5$
- $1 \leq m \leq 100$
- $0 \leq a_i, b_i \leq m$ for $i = 1, 2, \ldots, n$

Sample Input 1

```
5 10
5 6 0 10 2
2 3 10 0 3
```

Sample Output 1

```
13
```

Sample Input 2

```
7 100
21 15 0 32 21 23 14
8 23 20 67 31 72 15
```

Sample Output 2

```
87
```