Inauguration of the President

Timelimit: 1000ms Memorylimit: 128MB

1 Description

The inauguration ceremony for the new President will be hold on next monday. During the ceremony, the President has to travel around the Capital.

There are (n+1) west-east streets and (m+1) north-south streets which divide the Capital into n * m blocks. It's clear that the Capital has (n+1) * (m+1) crossings (intersections of streets). The President will start his travel from a crossing at the southmost street, and ends at a crossing at the northmost street. The President will never head south and he will not visit a crossing twice.

The citizens will stand on both sides of every west-east street to see this ceremony. Between every two crossings contiguous on west-east streets there is a region. The capital has m * (n + 1) regions. When go throuth every region, it will cost some times and the President has to wave his hand. But the President can not wave his hand continuously for more than k minutes.

The President will get some pleasure points during each visit to a region. While not every citizen supports the President, the pleasure points he got can be zero or negative. Please help the President to find a route which can maximize the pleasure points he can get.

2 Input Format

The first line contains 3 integers n, m and k. $(1 \le n \le 100, 1 \le m \le 10000)$. The following 2 * (n + 1) lines, every two lines is the description to one westeast street (from north to south).

The first line contains m integers stand for the pleasure points he can get during visit to these regions. The second lines contains m integers stand for the time he need to go through these regions.

Every integers given will be at most $2^{31} - 1$

3 Output Format

The output contains only one line: the max pleasure points the President can get.

4 Sample Input

2 3 2

7 8 1

1 1 1

5 Sample Output

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