Keito Python Test

Problem Statement

There is an apartment which is designed in a way where we have N floors and each floor has M flats. On each floor there are few flats which have stairs that can take you upstairs or downstairs, which are marked as 1 and few which do not have stairs and are marked as 0. You can go to the next floor through a flat which has stairs in them and on a floor you can go in and out of any flat. Ram is an old man and is in some flat. Now he wants to go to the Kth flat of the ith floor but his knees hurt and he wants to traverse minimum number of flats to go that flat. He has the layout of the apartment with him but due to his age he cannot perform this calculation. Help ram find the right path to traverse to reach the Kth flat.

Input:

* First Line will be space separated N and M
* The Next N lines will each have M spaces separated 0 and 1.
* This line will have the space separated floor and flat number of Ram
* This line will have space separated floor and flat number where Ram wants to go.

Output:

The minimum number of flats Ram has to traverse to reach to the desired flat.

Note: The destination flat is not counted.

Example:

Input:

5 6

0 0 1 0 0 0

1 1 0 1 0 0

0 1 0 0 1 0

1 0 1 0 0 1

0 0 0 0 1 0

0 2

4 0

Output:

6

Explanation:

* The first Lines denotes that there are 5 floors and 6 flat on each floor
* The next 5 lines denote the stairs availability of each flat for every floor starting from ground floor and 1st flat.
* The second last line denotes that Ram is currently on the ground floor and is on the 3rd Flat.
* The last line denotes that Ram would like to Go to The 5th floor and 1st Flat.
* For Explanation of output please refer below Image:

