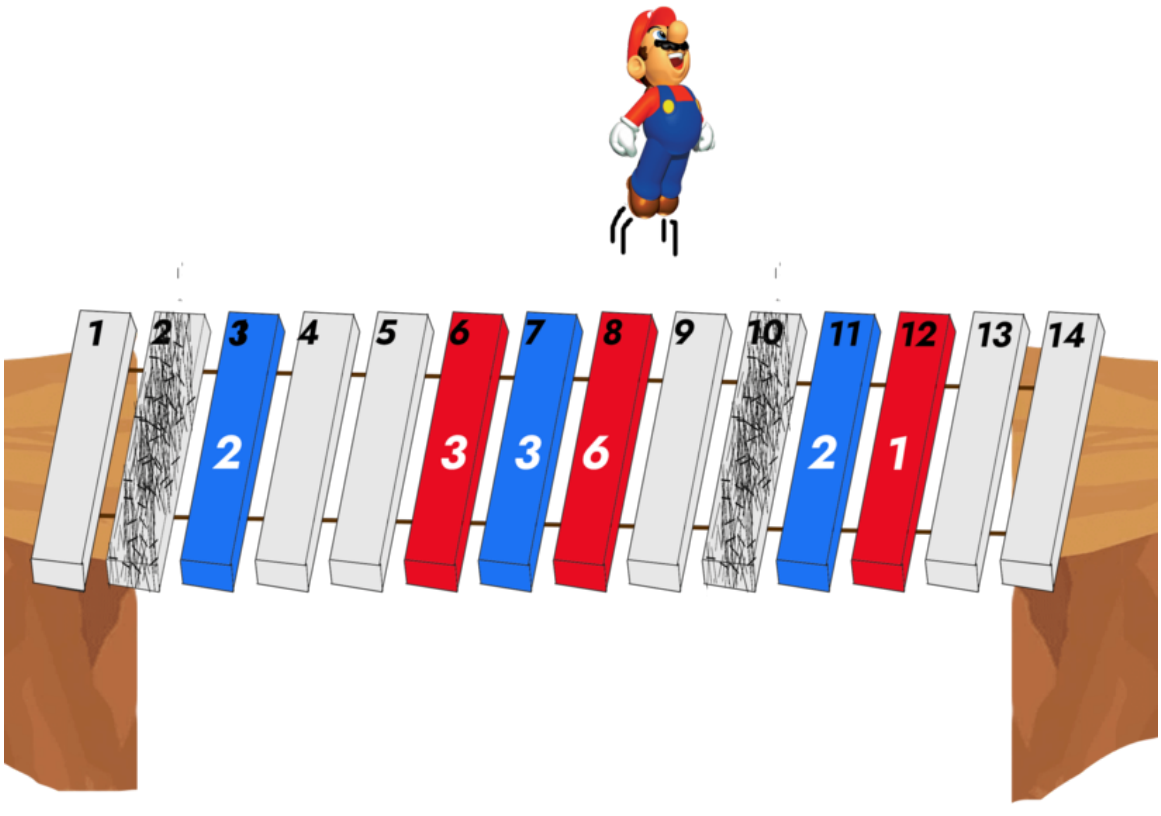
Mario and the Mysterious Bridge

locked

Our super famous Mario likes to travel a lot. One day on his way, he has found a strange bridge that helps to cross from a to b.

This bridge consists with wooden blocks such that some of them are colored and some are discolored. These colorful ones can be either **red** or **blue**. When the Mario jumps to a red wooden block he gets **teleported forward** the number of blocks written in the particular red block. (*if mario is in the red block no 2 and the number on the block 2 is 13, mario advances to the block no 15(**13+2**)*). When mario jumps into a blue block he gets **teleported backwards** the no of the blocks written on that particular block. (*if mario is on the blue block no 10 and the number on the block is 4, mario teleports to block no 6(**10-6**)*). Given the max distance mario can jump **J** (if j=3, mario can jump either 1,2 or 3 blocks each turn) and locations of red and blue blocks and the number on each block , and also given the broken blocks, find the minimun no of jumps that required to reach the last block.

Mario starts at block no **1** and he ends at block no **N**.



Input Format

1.First line contains the five integers **N,R,B,C, J**

2.Second line contains **R no of** interger pairs (x,y) such that x denotes the **red block no** and y denotes the number written in block x.

3.Third line contains **B no of** interger pairs (a,y) such that a denotes the **blue** block no and y denotes the number written in block a.

4.fourth line contains **C** no of intergers denoting the broken block indexes

* - **N - index of end block**

- **R- no of red blocks**
- **B-no of blue blocks**
- **C-no of broken blocks**
- **J-maximum distance mario can jump** *

Constraints

1. starting and ending blocks cannot be broken.
2. Theres always a way to reach the end of the bridge.
3. If mario jumps or teleported on a red or blue block he must teleport according to block number(*he cannot stay on a red or blue block without teleporting*).
4. Mario cannot land on a broken block under any circumstance
5. 0

Output Format

output a single integer denoting the **minimum no of jumps** required to reach the end block **N**

Sample Input 0

```
36 5 5 3 2
2 13 5 2 9 18 18 11 25 10
17 13 20 14 24 8 32 2 34 22
2 7 9
```

Sample Output 0

```
13
```

Submissions: 6
Max Score: 100

Rate This Challenge:

More

Admin Options

Edit Challenge

View Submissions

C++

```
1 #include <cmath>
2 #include <cstdio>
3 #include <vector>
4 #include <iostream>
```

```
#include <algorithm>
using namespace std;


int main() {
    /* Enter your code here. Read input from STDIN. Print output to STDOUT */
    return 0;
}

```

Line: 1 Col: 1

Upload Code as File Test against custom input Run Code Submit Code