



All Domains > Algorithms > Implementation > Jumping on the Clouds

Badge Progress (Details)

Points: 1160.76 Rank: 16777

Jumping on the Clouds

by Shafaet

Problem

Submissions

Leaderboard

Discussions

Editorial

Emma is playing a new mobile game involving n clouds numbered from 0 to $n - 1$. A player initially starts out on cloud c_0 , and they must jump to cloud c_{n-1} . In each step, she can jump from any cloud i to cloud $i + 1$ or cloud $i + 2$.

There are two types of clouds, *ordinary clouds* and *thunderclouds*. The game ends if Emma jumps onto a thundercloud, but if she reaches the last cloud (i.e., c_{n-1}), she wins the game!



Can you find the minimum number of jumps Emma must make to win the game? It is guaranteed that clouds c_0 and c_{n-1} are ordinary-clouds and it is *always possible* to win the game.

Input Format

The first line contains an integer, n (the total number of clouds).

The second line contains n space-separated binary integers describing clouds c_0, c_1, \dots, c_{n-1} .

- If $c_i = 0$, the i^{th} cloud is an ordinary cloud.
- If $c_i = 1$, the i^{th} cloud is a thundercloud.

Constraints

- $2 \leq n \leq 100$
- $c_i \in \{0, 1\}$
- $c_0 = c_{n-1} = 0$

Output Format

Print the minimum number of jumps needed to win the game.

Sample Input 0

```
7
0 0 1 0 0 1 0
```

Sample Output 0

```
4
```

Sample Input 1

```
6
0 0 0 0 1 0
```

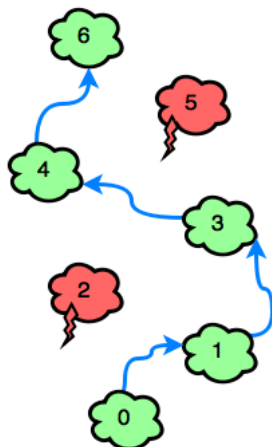
Sample Output 1

```
3
```

Explanation

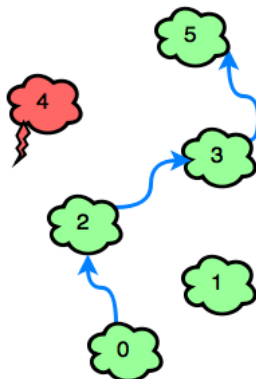
Sample Case 0:

Because c_2 and c_5 in our input are both 1, Emma must avoid c_2 and c_5 . Bearing this in mind, she can win the game with a minimum of 4 jumps:



Sample Case 1:

The only thundercloud to avoid is c_4 . Emma can win the game in 3 jumps:



f t in



Submissions: 19846

Max Score: 20

Difficulty: Easy

Rate This Challenge:

☆☆☆☆☆

Current Buffer (saved locally, editable)  

C#



```
1 using System;
2 using System.Collections.Generic;
3 using System.IO;
4 using System.Linq;
5 class Solution {
6
7     static void Main(String[] args) {
8
9         int n = int.Parse(Console.ReadLine());
10        int[] clouds = Array.ConvertAll(Console.ReadLine().Split(' '), e => int.Parse(e));
11
12
13        int jumps = 0;
14        for (int i = 0; i + 1 < clouds.Length; )
15        {
16            if (clouds[i + 1] == 1 || (i+2 < clouds.Length && clouds[i+2] ==0))
17            {
18                jumps++;
19                i += 2;
20            }
21            else
22            {
23                jumps++;
24                i++;
25            }
26        }
27        Console.WriteLine(jumps);
28
29    }
30 }
31
32
```

Line: 27 Col: 38

 [Upload Code as File](#)☐ Test against custom input

Run Code

Submit Code

Congrats, you solved this challenge!

✓ Test Case #0

✓ Test Case #3

✓ Test Case #6

✓ Test Case #1

✓ Test Case #4

✓ Test Case #7

✓ Test Case #2

✓ Test Case #5

✓ Test Case #8

[Next Challenge](#)

Copyright © 2016 HackerRank. All Rights Reserved

Join us on IRC at [#hackerrank](#) on freenode for hugs or bugs.[Contest Calendar](#) | [Interview Prep](#) | [Blog](#) | [Scoring](#) | [Environment](#) | [FAQ](#) | [About Us](#) | [Support](#) | [Careers](#) | [Terms Of Service](#) | [Privacy Policy](#) | [Request a Feature](#)