

# Jumping on the Clouds

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

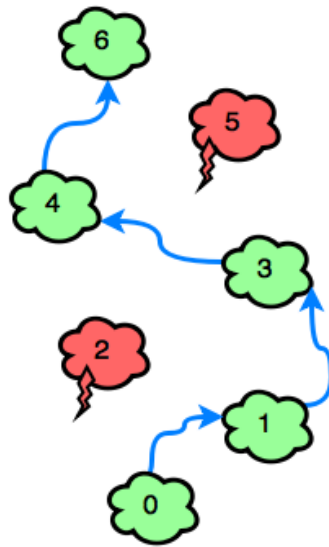
### Sample Output 1

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:

