

# Jumping on the Clouds: Revisited

Aerith is playing a cloud hopping game. In this game, there are sequentially numbered clouds that can be *thunderheads* or *cumulus* clouds. Her character must jump from cloud to cloud until it reaches the start again.

To play, Aerith is given an array of clouds,  $c$  and an energy level  $e = 100$ . She starts from  $c[0]$  and uses 1 unit of energy to make a jump of size  $k$  to cloud  $c[(i + k) \% n]$ . If Aerith lands on a thundercloud,  $c[i] = 1$ , her energy ( $e$ ) decreases by 2 additional units. The game ends when Aerith lands back on cloud 0.

Given the values of  $n$ ,  $k$ , and the configuration of the clouds as an array  $c$ , can you determine the final value of  $e$  after the game ends?

For example, give  $c = [0, 0, 1, 0]$  and  $k = 2$ , the indices of her path are  $0 \rightarrow 2 \rightarrow 0$ . Her energy level reduces by 1 for each jump to 98. She landed on one thunderhead at an additional cost of 2 energy units. Her final energy level is 96.

**Note:** Recall that  $\%$  refers to the [modulo operation](#). In this case, it serves to make the route circular. If Aerith is at  $c[n - 1]$  and jumps 1, she will arrive at  $c[0]$ .

## Function Description

Complete the `jumpingOnClouds` function in the editor below. It should return an integer representing the energy level remaining after the game.

`jumpingOnClouds` has the following parameter(s):

- $c$ : an array of integers representing cloud types
- $k$ : an integer representing the length of one jump

## Input Format

The first line contains two space-separated integers,  $n$  and  $k$ , the number of clouds and the jump distance.

The second line contains  $n$  space-separated integers  $c[i]$  where  $0 \leq i < n$ . Each cloud is described as follows:

- If  $c[i] = 0$ , then cloud  $i$  is a *cumulus* cloud.
- If  $c[i] = 1$ , then cloud  $i$  is a *thunderhead*.

## Constraints

- $2 \leq n \leq 25$
- $1 \leq k \leq n$
- $n \% k = 0$
- $c[i] \in \{0, 1\}$

## Output Format

Print the final value of  $e$  on a new line.

### Sample Input

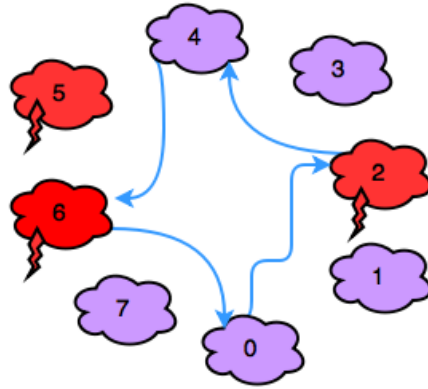
```
8 2
0 0 1 0 0 1 1 0
```

### Sample Output

92

### Explanation

In the diagram below, *red* clouds are thunderheads and *purple* clouds are cumulus clouds:



Observe that our thunderheads are the clouds numbered 2, 5, and 6. Aerith makes the following sequence of moves:

1. Move:  $0 \rightarrow 2$ , Energy:  $e = 100 - 1 - 2 = 97$ .
2. Move:  $2 \rightarrow 4$ , Energy:  $e = 97 - 1 = 96$ .
3. Move:  $4 \rightarrow 6$ , Energy:  $e = 96 - 1 - 2 = 93$ .
4. Move:  $6 \rightarrow 0$ , Energy:  $e = 93 - 1 = 92$ .