

# Problem: Jumping on the cloud: Revisited

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Aerith is playing a cloud game! In this game, there are clouds numbered sequentially from  $1$  to  $n$ . Each cloud is either an *ordinary cloud* or a *thundercloud*.

Aerith starts out on cloud  $1$  with energy level  $e$ . She can use  $k$  unit of energy to make a jump of size  $k$  to cloud  $k$ , and she jumps until she gets back to cloud  $1$ . If Aerith lands on a thundercloud, her energy ( $e$ ) decreases by  $1$  additional units. The game ends when Aerith lands back on cloud  $1$ . Given the values of  $n$ ,  $k$ , and the configuration of the clouds, can you determine the final value of  $e$  after the game ends?

**Note:** Recall that  $\%$  refers to the [modulo operation](#).

## Input Format

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

The second line contains  $n$  space-separated integers describing the respective values of clouds.

Each cloud is described as follows:

- If  $0$ , then cloud  $i$  is an *ordinary cloud*.
- If  $1$ , then cloud  $i$  is a *thundercloud*.

## Constraints

- $1 \leq n \leq 10^5$
- $1 \leq k \leq 10^5$
- $0 \leq e \leq 10^5$
- $0 \leq a_i \leq 1$

## Output Format

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

## Sample Input

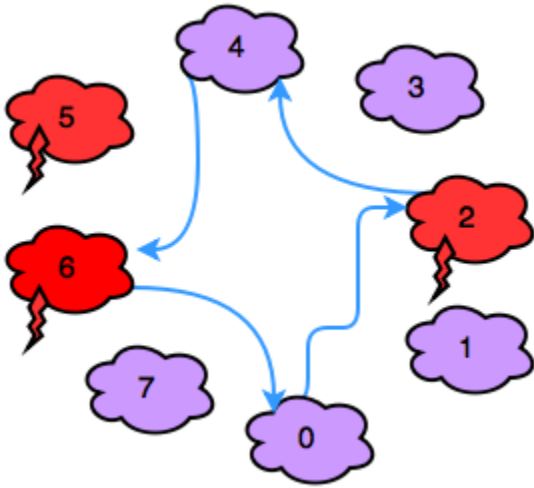
```
8 2
0 0 1 0 0 1 1 0
```

## Sample Output

```
92
```

## Explanation

In the diagram below, *red* clouds are thunderclouds and *purple* clouds are ordinary clouds:



Observe that our thunderclouds are the clouds numbered , , and . Aerith makes the following sequence of moves:

1. Move: , Energy: .
2. Move: , Energy: .
3. Move: , Energy: .
4. Move: , Energy: .

Thus, we print as our answer.

## Solution

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```
int main()
{
    int jumps, totalClouds, energy=100;
    cin>>totalClouds >>jumps;
    int clouds[totalClouds];

    for(int i=0; i<totalClouds; i++)
    {
        cin>>clouds[i] ;    //to know if a regular cloud or thundercloud ?
    }

    /*Processing the data*/
    int nextcloud=0;
    do
    {
        nextcloud=(nextcloud+jumps)%totalClouds;
        (clouds[nextcloud]==1? energy-=3 : energy-=1);
    }
    while(nextcloud!=0);
    cout<<energy;
    return 0;
}
```

- Anshul Aggarwal