Problem: Jumping on the cloud: Revisited

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

Aerith starts out on cloud  with energy level . She can use  unit of energy to make a jump of size  to cloud , and she jumps until she gets back to cloud . If Aerith lands on a thundercloud, her energy () decreases by  additional units. The game ends when Aerith lands back on cloud .

Given the values of , , and the configuration of the clouds, can you determine the final value of  after the game ends?

**Note:** Recall that  refers to the [modulo operation](https://en.wikipedia.org/wiki/Modulo_operation).

**Input Format**

The first line contains two space-separated integers,  (the number of clouds) and  (the jump distance), respectively.   
The second line contains  space-separated integers describing the respective values of clouds . Each cloud is described as follows:

* If , then cloud  is an *ordinary* cloud.
* If , then cloud  is a *thundercloud*.

**Constraints**

**Output Format**

Print the final value of  on a new line.

**Sample Input**

8 2

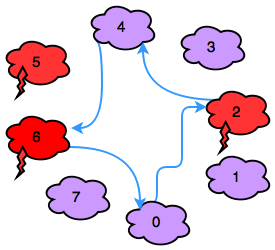
0 0 1 0 0 1 1 0

**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

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;

}

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