



HOME CONTESTS GYM PROBLEMSET GROUPS RATING API CANADA CUP 🛣 SECTIONS

PROBLEMS SUBMIT STATUS STANDINGS CUSTOM TEST

B. Bear and Finding Criminals

time limit per test: 2 seconds memory limit per test: 256 megabytes input: standard input output: standard output

There are n cities in Bearland, numbered 1 through n. Cities are arranged in one long row. The distance between cities i and j is equal to |i-j|.

Limak is a police officer. He lives in a city *a*. His job is to catch criminals. It's hard because he doesn't know in which cities criminals are. Though, he knows that there is **at most one** criminal in each city.

Limak is going to use a BCD (Bear Criminal Detector). The BCD will tell Limak how many criminals there are for every distance from a city *a*. After that, Limak can catch a criminal in each city for which he **is sure** that there must be a criminal.

You know in which cities criminals are. Count the number of criminals Limak will catch, after he uses the BCD.

Input

The first line of the input contains two integers n and a ($1 \le a \le n \le 100$) — the number of cities and the index of city where Limak lives.

The second line contains n integers $t_1, t_2, ..., t_n (0 \le t_i \le 1)$. There are t_i criminals in the i-th city.

Output

Print the number of criminals Limak will catch.

Examples

input	
63 111010	
output	
3	
input	

input 52 00010 output 1

Note

In the first sample, there are six cities and Limak lives in the third one (blue arrow below). Criminals are in cities marked red.

Using the BCD gives Limak the following information:

- There is one criminal at distance 0 from the third city Limak is sure that this criminal is
 exactly in the third city.
- There is one criminal at distance 1 from the third city Limak doesn't know if a criminal is in the second or fourth city.
- There are two criminals at distance 2 from the third city Limak is sure that there is one criminal in the first city and one in the fifth city.
- There are zero criminals for every greater distance.

So, Limak will catch criminals in cities 1, 3 and 5, that is 3 criminals in total.

Codeforces Round #356 (Div. 2)

Finished

→ Virtual participation

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Start virtual contest





In the second sample (drawing below), the BCD gives Limak the information that there is one criminal at distance 2 from Limak's city. There is only one city at distance 2 so Limak is sure where a criminal is.

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