E1. Median on Segments (Permutations Edition)

time limit per test
3 seconds
memory limit per test
256 megabytes
input
standard input
output
standard output

You are given a permutation $p_1,p_2,\ldots,p_n$. A permutation of length n is a sequence such that each integer between 1 and n occurs exactly once in the sequence.

Find the number of pairs of indices (l,r) $(1 \le l \le r \le n)$ such that the value of the median of $p_l,p_{l+1},\ldots,p_r$ is exactly the given number m.

The median of a sequence is the value of the element which is in the middle of the sequence after sorting it in non-decreasing order. If the length of the sequence is even, the left of two middle elements is used.

For example, if $a=[4,2,7,5]$ then its median is 4 since after sorting the sequence, it will look like $[2,4,5,7]$ and the left of two middle elements is equal to 4. The median of $[7,1,2,9,6]$ equals 6 since after sorting, the value 6 will be in the middle of the sequence.

Write a program to find the number of pairs of indices (l,r) $(1 \le l \le r \le n)$ such that the value of the median of $p_l,p_{l+1},\ldots,p_r$ is exactly the given number m.

Input

The first line contains integers n and m $(1 \le n \le 2 \cdot 10^5,\ 1 \le m \le n)$ — the length of the given sequence and the required value of the median.

The second line contains a permutation $p_1,p_2,\ldots,p_n$ $(1 \le p_i \le n)$. Each integer between 1 and n occurs in p exactly once.

Output

Print the required number.

Examples

input

Copy

```
5 4
2 4 5 3 1
```

output

Copy

```
4
```

input

Copy

```
5 5
1 2 3 4 5
```

output

Copy

```
1
```

input

Copy

```
15 8
1 15 2 14 3 13 4 8 12 5 11 6 10 7 9
```

output

Copy

```
48
```

Note

In the first example, the suitable pairs of indices are: (1,3), (2,2), (2,3) and (2,4).