

SREDNJI

Consider a sequence A of integers, containing N integers between 1 and N . Each integer appears

exactly once in the sequence.

A subsequence of A is a sequence obtained by removing some (possibly none) numbers from the

beginning of A , and then from the end of A .

Calculate how many different subsequences of A of odd length have their median equal to B . The

median of a sequence is the element in the middle of the sequence after it is sorted. For example, the

median of the sequence $\{5, 1, 3\}$ is 3.

Input

The first line contains two integers, N ($1 \leq N \leq 100000$) and B ($1 \leq B \leq N$).

The second line contains N integers separated by spaces, the elements of sequence A .

Output

Output the number of subsequences of A whose median is B .

Example

Input:

5 4
1 2 3 4 5

Output:

2

Input:

6 3
1 2 4 5 6 3

Output:

1

Input:

7 4
5 7 2 4 3 1 6

Output:

4

In the fourth example, the four subsequences of A with median 4 are {4}, {7, 2, 4}, {5, 7, 2, 4, 3} and {5, 7, 2, 4, 3, 1, 6}.