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.

Sample test data

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}.