Problem I
Microwavable Subsequence

You are given an array of N integers: $[A_1, A_2, \ldots, A_N]$.

A subsequence can be derived from an array by removing zero or more elements without changing the order of the remaining elements. For example, $[2, 1, 2]$, $[3, 3]$, $[1]$, and $[3, 2, 1, 3, 2]$ are subsequences of array $[3, 2, 1, 3, 2]$, while $[1, 2, 3]$ is not a subsequence of array $[3, 2, 1, 3, 2]$.

A subsequence is *microwavable* if the subsequence consists of **at most** two distinct values and each element differs from its adjacent elements. For example, $[2, 1, 2]$, $[3, 2, 3, 2]$, and $[1]$ are microwavable, while $[3, 3]$ and $[3, 2, 1, 3, 2]$ are not microwavable.

Denote a function $f(x, y)$ as the length of the longest microwavable subsequence of array A such that each element within the subsequence is either x or y. Find the sum of $f(x, y)$ for all $1 \leq x < y \leq M$.

Input

The first line consists of two integers N M ($1 \leq N, M \leq 300\,000$).

The second line consists of N integers A_i ($1 \leq A_i \leq M$).

Output

Output a single integer representing the sum of $f(x, y)$ for all $1 \leq x < y \leq M$.

Sample Input #1

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

Sample Output #1

```
13
```

Explanation for the sample input/output #1

The value of $f(1, 2)$ is 3, taken from the subsequence $[2, 1, 2]$ that can be obtained by removing A_1 and A_4. The value of $f(1, 3)$ is 3, taken from the subsequence $[3, 1, 3]$ that can be obtained by removing A_2 and A_5. The value of $f(2, 3)$ is 4, taken from the subsequence $[3, 2, 3, 2]$ that can be obtained by removing A_3. The value of $f(1, 4)$, $f(2, 4)$, and $f(3, 4)$ are all 1.

Sample Input #2

```
3 3
1 1 1
```

Sample Output #2

```
2
```

Explanation for the sample input/output #2

The value of $f(1, 2)$ and $f(1, 3)$ are both 1, while the value of $f(2, 3)$ is 0.

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