

C. Movie Critics

time limit per test: 2 seconds

memory limit per test: 256 megabytes

input: standard input

output: standard output

A film festival is coming up in the city N. The festival will last for exactly n days and each day will have a premiere of exactly one film. Each film has a genre — an integer from 1 to k .

On the i -th day the festival will show a movie of genre a_i . We know that a movie of each of k genres occurs in the festival programme at least once. In other words, each integer from 1 to k occurs in the sequence a_1, a_2, \dots, a_n at least once.

Valentine is a movie critic. He wants to watch some movies of the festival and then describe his impressions on his site.

As any creative person, Valentine is very susceptible. After he watched the movie of a certain genre, Valentine forms the *mood* he preserves until he watches the next movie. If the genre of the next movie is the same, it does not change Valentine's mood. If the genres are different, Valentine's mood changes according to the new genre and Valentine has a *stress*.

Valentine can't watch all n movies, so he decided to exclude from his to-watch list movies of one of the genres. In other words, Valentine is going to choose exactly one of the k genres and will skip all the movies of this genre. He is sure to visit other movies.

Valentine wants to choose such genre x ($1 \leq x \leq k$), that the total number of after-movie stresses (after all movies of genre x are excluded) were minimum.

Input

The first line of the input contains two integers n and k ($2 \leq k \leq n \leq 10^5$), where n is the number of movies and k is the number of genres.

The second line of the input contains a sequence of n positive integers a_1, a_2, \dots, a_n ($1 \leq a_i \leq k$), where a_i is the genre of the i -th movie. It is guaranteed that each number from 1 to k occurs at least once in this sequence.

Output

Print a single number — the number of the genre (from 1 to k) of the excluded films. If there are multiple answers, print the genre with the minimum number.

Examples

| |
|-----------------------------|
| input |
| 10 3 1 1 2 3 2 3 3 1 1 3 |
| output |
| 3 |

| |
|----------------------|
| input |
| 7 3 3 1 3 2 3 1 2 |
| output |
| 1 |

Note

In the first sample if we exclude the movies of the 1st genre, the genres 2, 3, 2, 3, 3, 3 remain, that is 3 stresses; if we exclude the movies of the 2nd genre, the genres 1, 1, 3, 3, 3, 1, 1, 3 remain, that is 3 stresses; if we exclude the movies of the 3rd genre the genres 1, 1, 2, 2, 1, 1 remain, that is 2 stresses.

In the second sample whatever genre Valentine excludes, he will have exactly 3 stresses.