I. Lottery

time limit per test: 2 seconds
memory limit per test: 512 megabytes
input: standard input
output: standard output

Today Berland holds a lottery with a prize — a huge sum of money! There are k persons, who attend the lottery. Each of them will receive a unique integer from 1 to k.

The organizers bought n balls to organize the lottery, each of them is painted some color, the colors are numbered from 1 to k. A ball of color c corresponds to the participant with the same number. The organizers will randomly choose one ball — and the winner will be the person whose color will be chosen!

Five hours before the start of the lottery the organizers realized that for the lottery to be fair there must be an equal number of balls of each of k colors. This will ensure that the chances of winning are equal for all the participants.

You have to find the minimum number of balls that you need to repaint to make the lottery fair. A ball can be repainted to any of the k colors.

Input

The first line of the input contains two integers n and k ($1 \le k \le n \le 100$) — the number of balls and the number of participants. It is guaranteed that n is evenly divisible by k.

The second line of the input contains space-separated sequence of n positive integers c_i ($1 \le c_i \le k$), where c_i means the original color of the i-th ball.

Output

In the single line of the output print a single integer — the minimum number of balls to repaint to make number of balls of each color equal.

Examples

input
4 2 2 1 2 2
output
1

input
8 4 1 2 1 1 1 4 1 4
output
3

Note

In the first example the organizers need to repaint any ball of color 2 to the color 1.

In the second example the organizers need to repaint one ball of the color 1 to the color 2 and two balls of the color 1 to the color 3.

→ Virtual participation

Virtual contest is a way to take part in past contest, as close as possible to participation on time. It is supported only ACM-ICPC mode for virtual contests. If you've seen these problems, a virtual contest is not for you - solve these problems in the archive. If you just want to solve some problem from a contest, a virtual contest is not for you - solve this problem in the archive. Never use someone else's code, read the tutorials or communicate with other person during a virtual contest.

Start virtual contest

→ Problem tags

implementation

No tag edit access

→ Contest materials

- Announcement   ✕
- Statements   ✕