



PROBLEMSET GROUPS RATING EDU API CALENDAR HELP HOME TOP CATALOG CONTESTS GYM RAYAN 🟋

PROBLEMS SUBMIT CODE MY SUBMISSIONS STATUS STANDINGS CUSTOM INVOCATION

F. The Lazy Author

time limit per test: 1 second memory limit per test: 256 megabytes

Since the author of this problem is too lazy to write a problem statement, he will provide you with the problem sketch only.

You're given an array a of length n consisting of zeros and ones, and an integer k.

You can perform no more than n operations. In one operation, you take a range of length exactly k and flip its values, making every 0 a 1 and every 1 a 0.

More formally, in each operation you can choose a value l ($1 \leq l \leq n-k+1$) then do the assignment $a_i := 1 - a_i$ for every i such that $l \leq i \leq l + k - 1$

Your task is to modify the array so that it contains no more than $\lfloor \frac{k}{2} \rfloor$ zeros.

Print the sequence of operations. If there are multiple answers, print any.

Input

The first line contains two integers, n and k, where $(1 \le k \le n \le 10^6)$.

The second line contains n integers, a_i , where $(0 \le a_i \le 1)$.

Output

The first line contains a number, m, which represents the number of operations.

The second line contains m integers, which represent the left side of each range.

If there are multiple answers, you can print any.

Examples

| input | Сору |
|---------|------|
| 3 2 | |
| 1 0 1 | |
| output | Сору |
| 0 | |
| input | Сору |
| 4 2 | |
| 0 0 0 0 | |
| output | Сору |
| 2 | |
| | |

Note

1 3

in the first test you don't need to do any operations.

in the second test you can just do operations in [1,2] and [3,4].

Syrian Private Universities Collegiate Programming Contest <u>2023</u>

Finished

Practice



→ About Contest



→ 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 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

→ Clone Contest to Mashup

You can clone this contest to a mashup.

Clone Contest

→ Submit?

Language: GNU G++20 13.2 (64 bit, win **✓** Choose

Choose File No file chosen

Submit

| → Last submissions | → L | ast | : su | bm | issic | ons |
|--------------------|-----|-----|------|----|-------|-----|
|--------------------|-----|-----|------|----|-------|-----|

| Submission | Time | Verdict | |
|------------|----------------------|------------------------|--|
| 302687978 | Jan/24/2025 05:27 | Accepted | |
| 302687634 | Jan/24/2025 05:21 | Wrong answer on test 6 | |
| 302687083 | Jan/24/2025 05:11 | Wrong answer on test 3 | |
| 302686943 | Jan/24/2025 05:08 | Wrong answer on test 3 | |
| 302686911 | Jan/24/2025 05:07 | Wrong answer on test 3 | |
| 302686794 | Jan/24/2025 05:04 | Wrong answer on test 6 | |
| 302686580 | Jan/24/2025 05:00 | Wrong answer on test 6 | |