D. Longest k-Good Segment

time limit per test: 1 second
memory limit per test: 256 megabytes
input: standard input
output: standard output

The array a with n integers is given. Let's call the sequence of one or more consecutive elements in a `segment`. Also let's call the segment *k*-`good` if it contains no more than k different values.

Find any longest *k*-good segment.

As the input/output can reach huge size it is recommended to use fast input/output methods: for example, prefer to use `scanf/printf` instead of `cin/cout` in C++, prefer to use `BufferedReader/PrintWriter` instead of `Scanner/System.out` in `Java`.

Input

The first line contains two integers n, k ($1 \le k \le n \le 5 \cdot 10^5$) — the number of elements in a and the parameter k.

The second line contains n integers a_i ($0 \le a_i \le 10^6$) — the elements of the array a.

Output

Print two integers l, r ($1 \le l \le r \le n$) — the index of the left and the index of the right ends of some *k*-good longest segment. If there are several longest segments you can print any of them. The elements in a are numbered from 1 to n from left to right.

Examples

input
5 5 1 2 3 4 5
output
1 5

input
9 3 6 5 1 2 3 2 1 4 5
output
3 7

input
3 1 1 2 3
output
1 1