Problem D

Harmonious

Time limit: 1 second
Memory: 1024 megabytes

Problem Description

In a kingdom where numbers are considered citizens, there is a sequence of **N** positive integers containing many elements, called sequence **a**. The king of this kingdom is very interested in subarrays of the sequence, especially those that have a property called ***harmonious***.

A subarray of sequence **a** is a contiguous sequence of elements from position $\mathbf{a_i}$ to $\mathbf{a_j}$ (where $\mathbf{1 \le i \le j \le N}$) in the array. A subarray is called ***harmonious*** if the average of all the elements in that subarray equals an exact positive integer **S**, specified by the king.

Your task: Find the longest ***harmonious*** subarray in the sequence, meaning the subarray with the most elements whose average is exactly **S**. If multiple harmonious subarrays have the same length, you must choose the subarray that starts at the **smallest** index. If no subarray satisfies the condition, print **0** to inform the king.

Input:

- The first line contains two positive integers **N** and **S** ($\mathbf{N \le 10^6}$ and $\mathbf{S \le 10^9}$).
- The second line contains **N** positive integers $\mathbf{a_1, a_2, ..., a_n}$ ($\mathbf{a_i \le 10^9}$).

Output:

- If you find a harmonious subarray that satisfies the requirement, print two integers:
  - The first number is the length of the longest harmonious subarray.
  - The second number is the index of the first element of that subarray.
- If no subarray satisfies the condition, print **0**.

Example:

INPUT	OUTPUT
5 3 1 2 3 4 6	3 2
4 3 1 2 5 6	0