

CMPUT 274 - Tangible Computing

Morning Problem: Plateaus

Description

Given a list of integers, a sequence of consecutive identical numbers is called a *plateau*. You should compute the length of the longest plateau.

Input

The first and only line of input will contain a list of space separated integers.

Output

Output a single line containing a single integer indicating the length of the longest plateau in the input array. That is, output the length of the longest sequence of consecutive identical values in the array.

Sample Input 1

1 2 2 1

Sample Output 1

2

Explanation: The two consecutive 2s form a plateau of length 2.

Sample Input 2

0 1 2 3

Sample Output 2

1

Explanation: There are 4 different plateaus of length 1 but no plateau of length 2.

Sample Input 3

3 2 4 4 1 1 1 5 4 4

Sample Output 3

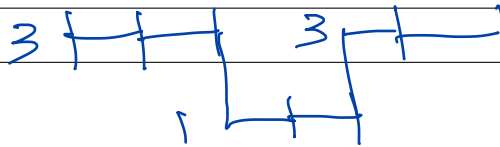
3

Explanation: The three consecutive 1s form a plateau of length 3. Note that even though there are four 4s, they are not consecutive so they comprise two separate length-2 plateaus. Also note we are calling the sequence of 1s a plateau even though the surrounding numbers (4 and 5) are greater.

High vs low plateaus

Sample Input 4

3 3 1 1 3 3



Sample Output 4

2

Explanation: There are three plateaus of length 2 but no length 3 plateaus so 2 is the longest plateau.