

5476. Find the Winner of an Array Game

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Given an integer array `arr` of **distinct** integers and an integer `k`.

A game will be played between the first two elements of the array (i.e. `arr[0]` and `arr[1]`). In each round of the game, we compare `arr[0]` with `arr[1]`, the larger integer wins and remains at position 0 and the smaller integer moves to the end of the array. The game ends when an integer wins `k` consecutive rounds.

Return *the integer which will win the game*.

It is **guaranteed** that there will be a winner of the game.

User Accepted: 0

User Tried: 0

Total Accepted: 0

Total Submissions: 0

Difficulty: Medium

Example 1:

Input: `arr = [2,1,3,5,4,6,7]`, `k = 2`

Output: 5

Explanation: Let's see the rounds of the game:

Round	arr	winner	win_count
1	[2,1,3,5,4,6,7]	2	1
2	[2,3,5,4,6,7,1]	3	1
3	[3,5,4,6,7,1,2]	5	1
4	[5,4,6,7,1,2,3]	5	2

So we can see that 4 rounds will be played and 5 is the winner because it wins 2 consecutive rounds.

Example 2:

Input: `arr = [3,2,1]`, `k = 10`

Output: 3

Explanation: 3 will win the first 10 rounds consecutively.

Example 3:

Input: `arr = [1,9,8,2,3,7,6,4,5]`, `k = 7`

Output: 9

Example 4:

Input: `arr = [1,11,22,33,44,55,66,77,88,99]`, `k = 1000000000`

Output: 99