**[3423. Maximum Difference Between Adjacent Elements in a Circular Array](https://leetcode.com/problems/maximum-difference-between-adjacent-elements-in-a-circular-array/)**

Given a **circular** array nums, find the **maximum** absolute difference between adjacent elements.

**Note**: In a circular array, the first and last elements are adjacent.

**Example 1:**

**Input:** nums = [1,2,4]

**Output:** 3

**Explanation:**

Because nums is circular, nums[0] and nums[2] are adjacent. They have the maximum absolute difference of |4 - 1| = 3.

**Example 2:**

**Input:** nums = [-5,-10,-5]

**Output:** 5

**Explanation:**

The adjacent elements nums[0] and nums[1] have the maximum absolute difference of |-5 - (-10)| = 5.

**Constraints:**

* 2 <= nums.length <= 100
* -100 <= nums[i] <= 100

Solution:--

class Solution {

    public int maxAdjacentDistance(int[] nums) {

        int n = nums.length;  // Get the length of the array

        // Initialize 'ans' with the absolute difference between the first and last element

        int ans = Math.abs(nums[0] - nums[n - 1]);

        // Iterate over the array starting from the second element

        for (int i = 1; i < n; ++i) {

            // Calculate the absolute difference of adjacent elements and update 'ans' if larger

            ans = Math.max(ans, Math.abs(nums[i] - nums[i - 1]));

        }

        // Return the maximum absolute difference found

        return ans;

    }

}