

905. Sort Array By Parity

Solved

Easy Topics Companies

Given an integer array `nums`, move all the even integers at the beginning of the array followed by all the odd integers.

Return *any array that satisfies this condition*.

Example 1:

Input: `nums = [3,1,2,4]`

Output: `[2,4,3,1]`

Explanation: The outputs `[4,2,3,1]`, `[2,4,1,3]`, and `[4,2,1,3]` would also be accepted.

Example 2:

Input: `nums = [0]`

Output: `[0]`

Constraints:

- `1 <= nums.length <= 5000`
- `0 <= nums[i] <= 5000`

The screenshot shows a code editor with the following components:

- Problem List:** A sidebar on the left showing the current problem.
- Submission Status:** A bar at the top right indicating 'Accepted' and 'Solved'.
- Performance Graph:** A bar chart showing the runtime of the solution across different test cases. The x-axis represents runtime in milliseconds (85ms to 135ms), and the y-axis represents the percentage of test cases passed (0% to 8%).
- Code Editor:** The main area showing the C# code for the solution. The code uses a two-pointer approach to move even numbers to the front and odd numbers to the back.
- Test Result:** A section on the right showing the test results for the solution. It indicates that the solution is 'Accepted' and shows the input and output for a test case.

Код:

```
public class Solution
{
    public int[] SortArrayByParity(int[] nums)
    {
        int left = 0, right = nums.Length - 1;
```

```

while (left < right)
{
    // Если левый указатель указывает на четное число, перемещаемся вправо
    if (nums[left] % 2 == 0)
    {
        left++;
    }
    // Если правый указатель указывает на нечетное число, перемещаемся влево
    else if (nums[right] % 2 != 0)
    {
        right--;
    }
    // Если левый указатель указывает на нечетное число, а правый указатель
    указывает на четное число, меняем их местами
    else
    {
        int temp = nums[left];
        nums[left] = nums[right];
        nums[right] = temp;
        left++;
        right--;
    }
}

return nums;
}

```