19. Given an array of integers nums, half of the integers in nums are odd, and the other half are even.

Code:

```
def separate_odd_even(nums):
    left, right = 0, len(nums) - 1
    while left < right:
        while left < right and nums[left] % 2 == 0:
            left += 1
        while left < right and nums[right] % 2 != 0:
            right -= 1
        nums[left], nums[right] = nums[right], nums[left]

        left += 1
        right -= 1

    return nums
nums = [1, 2, 3, 4, 5, 6]
separated_nums = separate_odd_even(nums)
print("Separated array:", separated_nums)
```

Output:

```
Separated array: [6, 2, 4, 3, 5, 1]
```

Time Complexity:

- T(n)= O(n)