

10. Sort the array so that whenever `nums[i]` is odd, `i` is odd, and whenever `nums[i]` is even, `i` is even. Return any answer array that satisfies this condition.

```
def sort_array(nums):
```

```
    even_index = 0
```

```
    odd_index = 1
```

```
    while even_index < len(nums) and odd_index < len(nums):
```

```
        while even_index < len(nums) and nums[even_index] % 2 == 0:
```

```
            even_index += 2
```

```
            while odd_index < len(nums) and nums[odd_index] % 2 == 1:
```

```
                odd_index += 2
```

```
            if even_index < len(nums) and odd_index < len(nums):
```

```
                nums[even_index], nums[odd_index] = nums[odd_index], nums[even_index]
```

```
                even_index += 2
```

```
            odd_index += 2
```

```
    return nums
```

```
nums = [4, 2, 5, 7]
```

```
result = sort_array(nums)
```

```
print(result)
```

```
[4, 5, 2, 7]
```

```
output: === Code Execution Successful ===
```

TIME COMPLEXITY:-O(n)