18) 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.

## CODE:

```
def sorta(a):
    odd=sorted([x for x in a if x%2!=0])
    even=sorted([x for x in a if x%2==0])
    sorted_nums=[0]*len(a)
    sorted_nums[::2]=even
    sorted_nums[1::2]=odd
    return sorted_nums
a=[1,2,3,4,5,6]
print(sorta(a))
```

## OUTPUT:

```
○ C:\WINDOWS\system32\cmd. × + ∨

[2, 1, 4, 3, 6, 5]

Press any key to continue . . . |
```

TIME COMPLEXITY: O(nlogn)