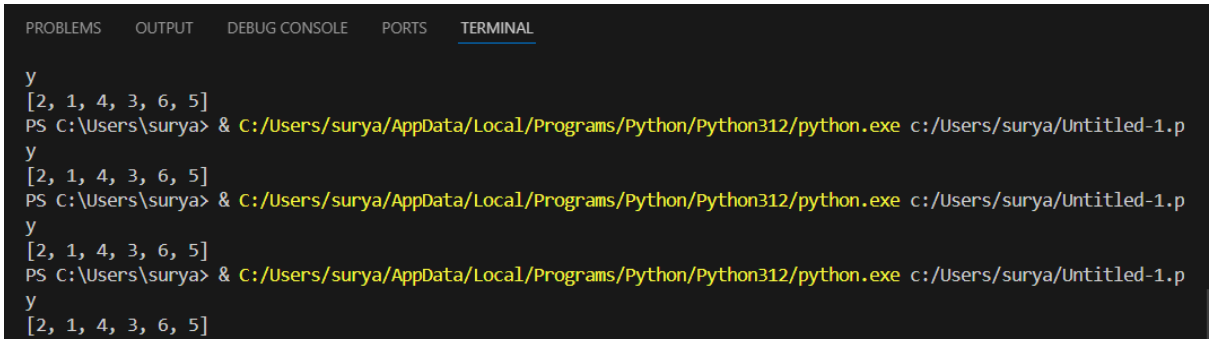
18. Sort the array so that whenever nums[i] is odd, i is odd, and whenever nums[i] is even, i is even. Return any answer array that satisfies this condition.

PROGRAM:

```
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:



TIME COMPLEXITY:

Time complexity for the above code is

F(n)=O(nlogn)