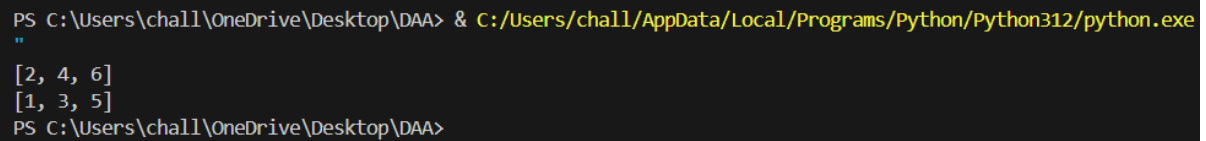


15. Given an array of integers half of int in nums are even and half are odd

PROGRAM:

```
a=[1,2,3,4,5,6]
even=[]
odd=[]
for i in range(len(a)):
    if a[i]%2==0:
        even.append(a[i])
    else:
        odd.append(a[i])
print(even)
print(odd)
```

OUTPUT:



```
PS C:\Users\chall\OneDrive\Desktop\DAA> & C:/Users/chall/AppData/Local/Programs/Python/Python312/python.exe
[2, 4, 6]
[1, 3, 5]
PS C:\Users\chall\OneDrive\Desktop\DAA>
```

TIME COMPLEXITY:

Time complexity for the above code is

$F(n)=O(n)$