

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

CODE:

```
a=[1,2,3,4,5,6]
```

```
even=[]
```

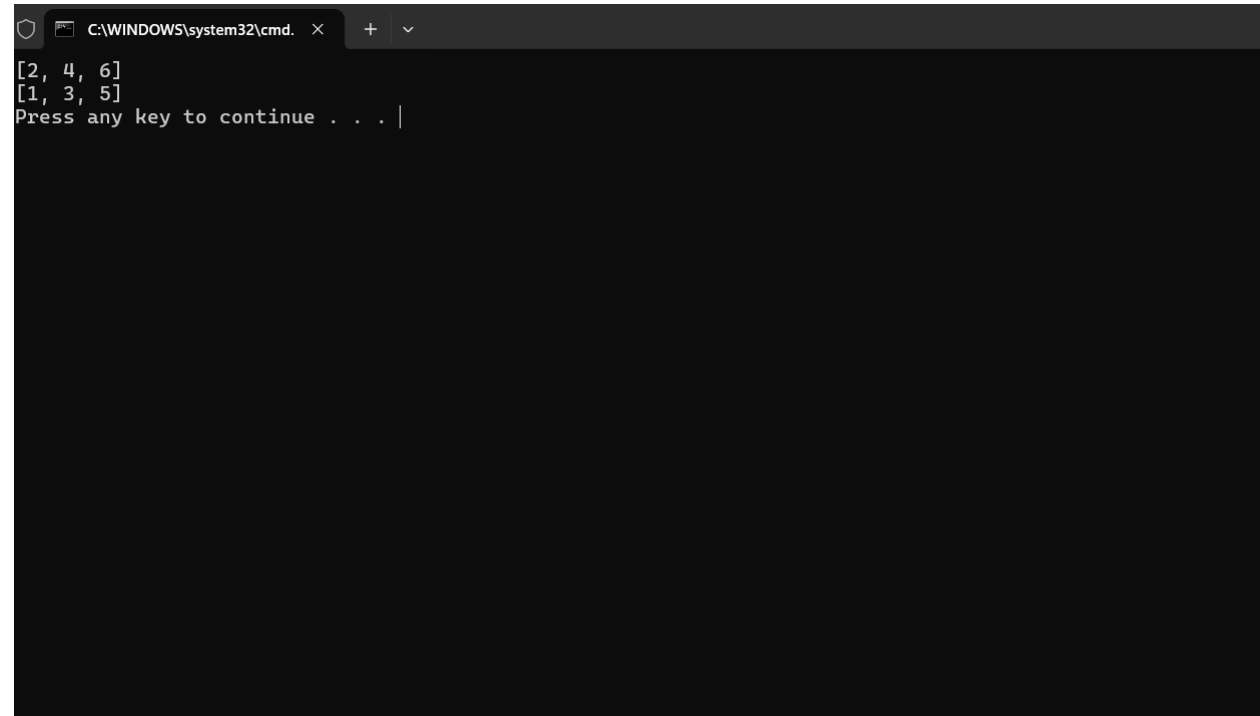
```
odd=[]
```

```
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:

A screenshot of a Windows command prompt window. The title bar shows the path 'C:\WINDOWS\system32\cmd.' and standard window controls. The command prompt displays the output of the Python code: the first line is '[2, 4, 6]' and the second line is '[1, 3, 5]'. Below these, it shows 'Press any key to continue . . . |' with a cursor at the end of the line.

```
C:\WINDOWS\system32\cmd.  X  +  v
[2, 4, 6]
[1, 3, 5]
Press any key to continue . . . |
```

TIME COMPLEXITY : $O(n)$