In [1]:
```
import numpy as np
arr=np.array([1,2,3,4,5,4,6,4])
print(arr)
x=np.where(arr==4)
print(x)
```

```
[1 2 3 4 5 4 6 4]
(array([3, 5, 7]),)
```

In [3]:
```
arr1=np.array([3,2,0,1])
print("\nOriginal array")
print("\nSorted array")
arr=np.array([[3,2,4],[5,0,1]])
print("\nOriginal array:",arr)
print("\nSorted array:",np.sort(arr))
```

```
Original array

Sorted array

Original array: [[3 2 4]
 [5 0 1]]

Sorted array: [[2 3 4]
 [0 1 5]]
```

In [4]:
```
sorted_array=np.array([1,3,5,7])
values=[2,4,6]
insert_indices=np.searchsorted(sorted_array,values)
print(sorted_array)
print(values)
print(insert_indices)
```

```
[1 3 5 7]
[2, 4, 6]
[1 2 3]
```

In [5]:
```
arr=np.array([41,42,43,44])
x=[True,False,True,False]
newarr=arr[x]
print("\nOriginal array:",arr)
print("\nFilter index:",x)
print("\nFilter array:",newarr)
```

```
Original array: [41 42 43 44]

Filter index: [True, False, True, False]

Filter array: [41 43]
```

In [6]:
```
arr=np.array([41,42,43,44])
filter_arr=arr>42
newarr=arr[filter_arr]
print("\nOriginal array:",arr)
print("\nFilter array:condition- >42:",filter_arr)
```

```
print("\nNew array:",newarr)
```

```
Original array: [41 42 43 44]

Filter array:condition- >42: [False False  True  True]

New array: [43 44]
```

In [ ]: