

Numpy

In [1]:

```
import numpy as np
a=np.zeros(3,dtype=int)
print(a)
```

[0 0 0]

In [2]:

```
import numpy as np
a=np.zeros((2,4),dtype=int)
print(a)
```

```
[[0 0 0 0]
 [0 0 0 0]]
```

In [3]:

```
a=np.zeros((4,4),dtype=int)
print(a)
```

```
[[0 0 0 0]
 [0 0 0 0]
 [0 0 0 0]
 [0 0 0 0]]
```

In [5]:

```
a=np.ones((4,4),dtype=float)
print(a)
```

```
[[1. 1. 1. 1.]
 [1. 1. 1. 1.]
 [1. 1. 1. 1.]
 [1. 1. 1. 1.]]
```

In [8]:

```
a=np.array([[10,20,30,40],[50,60,70,80]])
print(a)
```

```
[[10 20 30 40]
 [50 60 70 80]]
```

In [9]:

```
for i in a:
    print(i)
```

```
[10 20 30 40]
[50 60 70 80]
```

In [13]:

```
import numpy as np
arr=np.array([1,5,4,8,3,7])
max_element=np.max(arr)
min_element=np.min(arr)
print('maximum element in the array is :',max_element)
print('minimum element in the array is :',min_element)
```

```
maximum element in the array is : 8
minimum element in the array is : 1
```

In [15]:

```
a=np.array([1,2,3,2,3,4,5,6,7,8,2,4,2])
np.count_nonzero(a==2)
```

Out[15]:

4

In [16]:

```
import numpy as np
arr=np.array([2, 3, 4, 5, 3, 3,5, 4, 7, 8, 3])
print('Numpy Array:')
print(arr)
c=0
element=3
for j in arr:
    if j==element:
        c+=1
print("element occurred",c,"times")
```

```
Numpy Array:
[2 3 4 5 3 3 5 4 7 8 3]
element occurred 4 times
```

In []: