

In [1]:

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

[0 0 0]

In [2]:

```
a=np.ones(3,dtype=int)
a
```

Out[2]:

array([1, 1, 1])

In [3]:

```
a=np.array([1,2,3])
for i in a:
    print(i)
```

1  
2  
3

In [11]:

```
s=[]
a=int(input("enter size"))
for i in range(a):
    x=int(input("element"))
    s.append(x)
print(np.floor(s))
```

enter size3  
element1  
element2  
element3  
[1. 2. 3.]

In [12]:

```
import collections
x = np.array([1,2,3,4,5,1,2,1,9,1])
print("Original array:")
counter = collections.Counter(x)
print(counter)
```

Original array:  
Counter({1: 4, 2: 2, 3: 1, 4: 1, 5: 1, 9: 1})

In [14]:

```
a = np.array([2, 3, 4, 5, 3, 3, 5, 4, 7, 8, 3])
print('Numpy Array:')
print(a)
c = np.count_nonzero(a == 3)
print('Total occurrences of "3" in array: ', c)
```

Numpy Array:  
[2 3 4 5 3 3 5 4 7 8 3]  
Total occurrences of "3" in array: 4

In [16]:

```
c=np.count_nonzero(a<4)
print('total occurences\n',c)
```

total occurences  
5

In [17]:

```
n_array = np.array([[2, 3, 0],[4, 1, 6]])  
print("Given array:")  
print(n_array)  
print(2 in n_array)  
print(0 in n_array)  
print(6 in n_array)  
print(50 in n_array)  
print(10 in n_array)
```

```
Given array:  
[[2 3 0]  
 [4 1 6]]  
True  
True  
True  
False  
False
```

In [18]:

```
a=([1,2,3,4,5])  
np.max(a)
```

Out[18]:

5

In [19]:

```
np.min(a)
```

Out[19]:

1

In [ ]: