

In [1]:

```
import numpy as np
```

In [4]:

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

```
[0 0 0]
```

In [5]:

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

```
[1 1 1]
```

In [12]:

```
a=np.array([1,2,3,4,5])
for i in a:
    print(i,end=" ")
```

```
1 2 3 4 5
```

In [35]:

```
def array(a,x):
    a=np.array([1,2,3,4,2,3,4,2,2])
    count=0
    for i in a:
        if i==x:
            count=count+1
    print(count)
array(a,2)
```

```
4
```

In [36]:

```
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 [40]:

```
a=np.array([1,2,3,4,2,3,4,2,2])
count=np.count_nonzero(a==4)
print(count)
```

```
2
```

In [45]:

```
a=np.array([1,2,3,4,2,3,4,2,2])
count=0
for i in a:
    if i<4:
        count=count+1
print(count)
```

7

In [52]:

```
def array(a,x):
    a=np.array([1,2,3,4])
    for i in a:
        if i==x:
            print("Yes")
array(a,2)
```

Yes

In [53]:

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

Out[53]:

False

In [54]:

```
max(a)
```

Out[54]:

4

In [55]:

```
min(a)
```

Out[55]:

1

In [72]:

```
def max(a):  
    max=a[0]  
    a=np.array([1,2,3,4])  
    for i in range(len(a)):  
        if a[i]>max:  
            max=a[i]  
    print("Maximum value:",max)  
def min(a):  
    min=a[0]  
    a=np.array([1,2,3,4])  
    for i in range(len(a)):  
        if a[i]<min:  
            min=a[i]  
    print("Minimum value:",min)  
max(a)  
min(a)
```

Maximum value: 4
Minimum value: 1

In [12]:

```
import numpy as np  
a=[]  
n=int(input("Enter size:"))  
for i in range(n):  
    a.append(int(input("Enter value:")))  
a=np.array(a)  
print(a)
```

Enter size:3
Enter value:1
Enter value:2
Enter value:3
[1 2 3]

In []:

In []: