

```
In [1]: import numpy as np
a=np.zeros(3,dtype=int)
a
```

```
Out[1]: array([0, 0, 0])
```

```
In [2]: b=np.ones((3,3),dtype=int)
b
```

```
Out[2]: array([[1, 1, 1],
               [1, 1, 1],
               [1, 1, 1]])
```

```
In [3]: for i in a:
         print(i)
```

```
0
0
0
```

```
In [4]: n=int(input("enter the array size:"))
m=np.zeros(n,dtype=int)
for i in range(len(m)):
    m[i]=int(input("enter new element"))

m
```

```
enter the array size:3
enter new element1
enter new element2
enter new element3
```

```
Out[4]: array([1, 2, 3])
```

```
In [5]: arr=np.array([1,2,3,4,4,5,6,6,7,5,4,5,6,3,5,4])
```

```
In [6]: import collections
print("Original array:")
counter = collections.Counter(arr)
print(counter)
```

```
Original array:
Counter({4: 4, 5: 4, 6: 3, 3: 2, 1: 1, 2: 1, 7: 1})
```

```
In [7]: counter = collections.Counter(arr<=4)
print(counter)
```

```
Counter({True: 8, False: 8})
```

```
In [8]: np.count_nonzero(arr==2)
```

```
Out[8]: 1
```

```
In [9]: max(arr)
```

Out[9]: 7

In [10]: `min(arr)`

Out[10]: 1

In [11]: `print(2 in arr)`
`print(8 in arr)`

True
False

In []: