In [1]:

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

[0 0 0]

In [2]:

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

[1 1 1]

In [9]:

```python
import numpy as np
a=np.array([1,2,3])
print(a)
```

[1 2 3]

In [11]:

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

original array [1 2 3 4 5 1 2 1 9 1]
Counter({1: 4, 2: 2, 3: 1, 4: 1, 5: 1, 9: 1})

In [12]:

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

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

In [18]:

```python
p=np.array([1,2,3,4,5,6])
print("maximum element",max(p))
print("minimum element",min(p))
```

maximum element 6
minimum element 1

In [30]:

```python
m=np.arange(10).reshape(2,5)
print(m)
```

[[0 1 2 3 4]
 [5 6 7 8 9]]

In [27]:

```python
print(m<4)
```

[[True True True True False]
 [False False False False False]]

In [31]:

```python
print(np.count_nonzero(m<4))
```

4

In [42]:

```python
b=np.array([1,2,3,3,3,3,4,5,6,7,8,9])
print(b)
c=0
for i in b:
    if i==3:
        c=c+1
print("element occured is",c,"times")
```

```
[1 2 3 3 3 3 4 5 6 7 8 9]
element occured is 4 times
```

In [ ]: