

```
In [1]: import numpy as np
```

```
In [4]: a=np.array([range(27)])  
b=a.reshape(3,3,3)  
print(b)  
print(b[1:,1:,1:])
```

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

```
[[ 9 10 11]  
 [12 13 14]  
 [15 16 17]]
```

```
[[18 19 20]  
 [21 22 23]  
 [24 25 26]]]
```

```
[[[13 14]  
   [16 17]]
```

```
[[22 23]  
 [25 26]]]
```

```
In [8]: z=np.array([range(9)])  
y=z.reshape(3,3)  
print(y)  
x=np.array_split(y,3 , axis=1)  
print(x)
```

```
[[0 1 2]  
 [3 4 5]  
 [6 7 8]]  
[array([[0],  
        [3],  
        [6]]), array([[1],  
        [4],  
        [7]]), array([[2],  
        [5],  
        [8]])]
```

```
In [13]: from numpy import random  
i=random.choice([1,2,3,4,5,6,7,8,9])  
print(i)
```

```
1
```

```
In [17]: w=random.randint(100,size=(3,3))  
print(w)
```

```
[[63 34 59]  
 [50 87 57]  
 [40 36 66]]
```

```
In [19]: from numpy import random
i=random.choice([1,2,3,4,5,6,7,8,9] ,size=(3,4))
print(i)
```

```
[[2 1 2 9]
 [5 4 5 8]
 [8 7 5 2]]
```

```
In [20]: from numpy import random
i=random.choice([1,2,3,4,59], p=[0.5,0.1,0.1,0.1,0.2], size=(50,50))
print(i)
```

```
[[59  3  1 ... 59  2  4]
 [59  1  1 ... 59  1 59]
 [ 1  4  2 ...  3  4  3]
 ...
 [ 2  4  1 ...  2  1 59]
 [59  1  4 ...  1  1  1]
 [ 1  1  1 ...  1  1  2]]
```

```
In [21]: from numpy import random
i=random.choice([1,2,3,4,59], p=[0.5,0.1,0.1,0.1,0.2], size=(50,50))
print(i)
o=random.normal(size=(3,3))
print(o)
```

```
[[ 4 59  1 ...  4  1  4]
 [ 4 59 59 ...  1  1  1]
 [ 1 59  1 ...  1  1 59]
 ...
 [ 2  4  1 ...  3  1  1]
 [ 2  2 59 ...  1  1  1]
 [ 1  1  1 ...  1  4  4]]
[[-0.81923251 -1.19301402 -0.07271607]
 [ 0.58707434  0.09792596  0.10745177]
 [-0.51269374 -1.56835067  0.52434538]]
```

```
In [22]:
```

```
[[-1.14820015 -1.37632278  0.37499505]
 [ 1.6185771  -0.05647283 -0.99366581]
 [ 0.4565269   0.6391119   0.5944739  ]]
```

```
In [23]: o=random.normal(size=(3,3))
print(o)
```

```
[[ 0.06340166 -1.04123346  0.63100974]
 [-0.44779221 -1.7492937   0.20775008]
 [ 0.02162068 -1.18646045 -0.48647485]]
```

```
In [ ]:
```

