



```
In [46]: import numpy as np
```

```
In [47]: array=np.array([1,2,3,4,5])
print(array)
print(type(array))
```

```
[1 2 3 4 5]
<class 'numpy.ndarray'>
```

```
In [48]: arr=np.array((1,6))
print(arr)
print(type(arr))
```

```
[1 6]
<class 'numpy.ndarray'>
```

Dimensions in array

```
In [49]: ar=np.array(20)
print(ar)
print(ar.ndim)
```

```
20
0
```

```
In [50]: arr=np.array([1,2,3,4,4,5])
print(arr.ndim)
```

```
1
2D array
```

```
In [51]: arr_2D=np.array([[1,2,3,4,5],[6,7,8,9,0]])
print(arr_2D.ndim)
```

```
2
3D array
```

```
In [63]: import numpy as np

arn=np.array([[[1, 2, 3, 4, 5], [6, 7, 8, 9,0]], [[11, 12, 13, 14, 15],[16,17,
print(arn.ndim)
```

```
3
Indexing
```

```
In [67]: arr=np.array([1,2,3,4,5])
print(arr[4])
```

```
5
```

```
In [75]: arr_new=np.array([[1,2,4],[5,5,67]])
print(arr_new[0,1])
```

```
print(arr_new[1,2])
print(arr_new[0,0]+arr_new[1,2])
```

2
67
68

```
In [95]: arr=np.array([[[1,2,3],[4,5,6]],[[7,8,9],[10,11,12]]])
print(arr[0,0,0])
print(arr[0,0,1])
print(arr[0,0,2])
print(arr[0,1,0])
print(arr[0,1,1])
print(arr[0,1,2])
print(arr[1,0,0])
print(arr[1,0,1])
print(arr[1,0,2])
print(arr[1,1,0])
print(arr[1,1,1])
print(arr[1,1,2])
print(arr[0,1,2]+arr[1,0,0])
```

1
2
3
4
5
6
7
8
9
10
11
12
13

In []: