

```
In [2]: import numpy as np
a=np.array([5,5,5,5,5,5])
a
```

```
Out[2]: array([5, 5, 5, 5, 5, 5])
```

## 1-Dimensional array

```
In [4]: import numpy as np
a=np.array([5,5,5,])
a
```

```
Out[4]: array([5, 5, 5])
```

```
In [23]: len(a)
```

```
Out[23]: 3
```

```
In [25]: a[0]
```

```
Out[25]: 5
```

```
In [26]: a[0:3]
```

```
Out[26]: array([5, 5, 5])
```

```
In [27]: a[0:2]
```

```
Out[27]: array([5, 5])
```

## - ndarray means N number of dimention

```
In [5]: type(a)
```

```
Out[5]: numpy.ndarray
```

## 2-Dimensional array (row. colomn)

```
In [10]: # List of lists
b=np.array([[5,5,5],[5,5,5],[5,5,5]])
b
```

```
Out[10]: array([[5, 5, 5],
                [5, 5, 5],
                [5, 5, 5]])
```

```
In [24]: len(b)
```

```
Out[24]: 3
```

```
In [18]: # importing the module
import numpy as np

d1=np.array([4,5,6,7])
d1
```

```
Out[18]: array([4, 5, 6, 7])
```

```
In [19]: d2=np.array([[3,5,8,2],[3,4,7,5],[7,6,5,4]])
d2
```

```
Out[19]: array([[3, 5, 8, 2],
               [3, 4, 7, 5],
               [7, 6, 5, 4]])
```

1-Dimensional array is called vector

(there is no difference between row and column in 1-D)

2-Dimensional is called matrix

3-ndarray is used for both matrix and vector

Vector is 1-D

matrix is 2-D

"array" can mean either a single-dimensional array, or a multidimensional array