Numpy Arrays

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

```
In [2]: arr1=np.array([1,2,3,4,5])
        arr1
```

```
Out[2]: array([1, 2, 3, 4, 5])
```

```
In [3]: type(arr1)
```

```
Out[3]: numpy.ndarray
```

```
In [5]: arr2=np.array([[1,2,3],[4,5,6]])
        arr2
```

```
Out[5]: array([[1, 2, 3],
               [4, 5, 6]])
```

```
In [7]: arr3=np.zeros((2,3))
        arr3
```

```
Out[7]: array([[0., 0., 0.],
               [0., 0., 0.]])
```

```
In [9]: arr4=np.ones((3,3))
        arr4
```

```
Out[9]: array([[1., 1., 1.],
               [1., 1., 1.],
               [1., 1., 1.]])
```

```
In [10]: arr5=np.identity(5)
         arr5
```

```
Out[10]: array([[1., 0., 0., 0., 0.],
                [0., 1., 0., 0., 0.],
                [0., 0., 1., 0., 0.],
                [0., 0., 0., 1., 0.],
                [0., 0., 0., 0., 1.]])
```

```
In [14]: arr6=np.arange(5,16,2)
         arr6
```

```
Out[14]: array([ 5,  7,  9, 11, 13, 15])
```

```
In [15]: arr7=np.linspace(10,20,10)
         arr7
```

```
Out[15]: array([10.        , 11.11111111, 12.22222222, 13.33333333, 14.44444444,
                15.55555556, 16.66666667, 17.77777778, 18.88888889, 20.        ])
```

```
In [16]: arr8=arr7.copy()
         arr8
```

```
Out[16]: array([10.        , 11.11111111, 12.22222222, 13.33333333, 14.44444444,
                15.55555556, 16.66666667, 17.77777778, 18.88888889, 20.        ])
```

```
In [ ]:
```