In [11]:
```
import numpy as np
```

In [12]:
```
#creation of array in numpy
np.array([1,2,3,4,5,6,7,8,9])
```

Out[12]:
```
array([1, 2, 3, 4, 5, 6, 7, 8, 9])
```

In [13]:
```
#creation of zero array
np.zeros(10)
```

Out[13]:
```
array([0., 0., 0., 0., 0., 0., 0., 0., 0., 0.])
```

In [15]:
```
#creation of zero array with integer data type
np.zeros(10,dtype="int")
```

Out[15]:
```
array([0, 0, 0, 0, 0, 0, 0, 0, 0, 0])
```

In [19]:
```
#creation of array with only 1s
np.ones((3,3),dtype="int")
```

Out[19]:
```
array([[1, 1, 1],
       [1, 1, 1],
       [1, 1, 1]])
```

In [20]:
```
#creation of array for a range of values
np.arange(0,20,2)
```

Out[20]:
```
array([ 0,  2,  4,  6,  8, 10, 12, 14, 16, 18])
```

In [21]:
```
#creation of identity matrix
np.eye(3,3,dtype="int")
```

Out[21]:
```
array([[1, 0, 0],
       [0, 1, 0],
       [0, 0, 1]])
```

In [25]:
```
#creation of array with evenly spaced numbers for a given range
np.linspace(0,10,5)
```

Out[25]:
```
array([ 0. ,  2.5,  5. ,  7.5, 10. ])
```

In [26]:
```
#array with random values form 0 to 1
np.random.random((3,5))
```

Out[26]:
```
array([[0.90743513, 0.43969692, 0.61781948, 0.26310202, 0.14128491],
       [0.07880581, 0.62634911, 0.32368031, 0.05196832, 0.44140221],
       [0.91542443, 0.24905001, 0.60565067, 0.36000657, 0.20335392]])
```

In [34]:
```
#array with constant value
np.full((5,5),3.14)
```

Out[34]:
```
array([[3.14, 3.14, 3.14, 3.14, 3.14],
       [3.14, 3.14, 3.14, 3.14, 3.14],
       [3.14, 3.14, 3.14, 3.14, 3.14],
       [3.14, 3.14, 3.14, 3.14, 3.14],
       [3.14, 3.14, 3.14, 3.14, 3.14]])
```

In [35]:
```
#upcasting(one float data type makes other integer data types to float)
np.array([1,2,3,31.4])
```

Out[35]:
```
array([ 1. ,  2. ,  3. , 31.4])
```

In [41]:
```
#random array whose values has mean 0 and standard deviation 1
np.random.normal(0,1,(3,5))
```

Out[41]:
```
array([[-1.43802123,  0.90581797, -1.02755601,  1.40104468, -0.15417904],
       [-0.93908947,  1.61836108, -0.11374828, -0.52908785, -1.54104079],
       [ 2.30867719,  0.38021905,  0.59099245,  0.99488238,  1.06950177]])
```