```
In [1]: import numpy

In [2]: x = numpy.array([1,2,3])

In [3]: print x

        [1 2 3]


In [4]: print x[0]

        1


In [5]: w = numpy.zeros(10)

In [6]: print w

        [ 0.  0.  0.  0.  0.  0.  0.  0.  0.  0.]


In [7]: w = numpy.ones(10)

In [8]: print w

        [ 1.  1.  1.  1.  1.  1.  1.  1.  1.  1.]


In [9]: y = numpy.array([4,5,6])

In [10]: print y

        [4 5 6]


In [11]: print x

        [1 2 3]


In [12]: print x + y

        [5 7 9]


In [13]: 2 * x
Out[13]: array([2, 4, 6])

In [14]: x = 2 * x
```

```
In [15]: x
```
Out[15]: array([2, 4, 6])

```
In [16]: x * y
```
Out[16]: array([8, 20, 36])

```
In [17]: numpy.dot(x, y)
```
Out[17]: 64

```
In [18]: numpy.array([1,2,3], dtype=float)
```
Out[18]: array([1., 2., 3.])

```
In [19]: len(x)
```
Out[19]: 3

```
In [20]: L = [3,6,9]
```

```
In [21]: aL = numpy.array(L)
```

```
In [23]: aL
```
Out[23]: array([3, 6, 9])

```
In [ ]:
```