Importing NumPy:

```
import numpy as np
```

NumPy array vs Python array:

```
a = np.array([3, 4, 5])
b = np.array([4, 9, 7])
a + b
```

output:

```
array([ 7, 13, 12])
```

Two-dimensional NumPy array/ matrix

```
x = np.array([[1, 2], [3, 4]])
x
```

output:

```
array([[1, 2],
       [3, 4]])
```

Number of dimensions in a NumPy array

```
x.ndim
```

output:

```
2
```

Data type stored within the array

```
x.dtype
```

output:

```
dtype('int64')
```

Number of rows and columns respectively

```
x.shape
```

output:

```
(2, 2)
```

Finding the sum of a NumPy array

```
x.sum()
```

output:

```
np.int64(10)
```

same thing:

```
np.sum(x)
```

output:

```
np.int64(10)
```

Reshaping an array:

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

output:

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

```
x = x.reshape((3, 2))
x
```

output:

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

- Note: NumPy arrays are specified as a sequence of rows, *row-major ordering*, as opposed to *column-major ordering*.