

# NumPy Array Attributes

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```
[5]: import numpy as np  
  
a = np.arange(2,10)  
a
```

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

```
[6]: # Data Type of this ndarray  
  
a.dtype
```

```
[6]: dtype('int32')
```

```
[7]: # Size of array (menas how many elements on that list)  
  
a.size
```

```
[7]: 8
```

```
[8]: # how many dimensions  
  
a.ndim
```

```
[8]: 1
```

```
[9]: # shape  
# For 1-D Array then how many elements in that row  
  
a.shape
```

```
[9]: (8,)
```

```
[14]: # For 2-D Array then how many rows and column  
  
b = a.reshape(4,2)  
b
```

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

```
[15]: b.shape
```

```
[15]: (4, 2)
```

```
[23]: # For 3-D Array then how many 2-D Array, rows and columns

c = np.
    ↪array([[[10,20,30],[40,50,60],[70,80,90]],[[100,110,10],[120,130,11],[140,150,12]]])
c
```

```
[23]: array([[[ 10,  20,  30],
              [ 40,  50,  60],
              [ 70,  80,  90]],

            [[100, 110,  10],
              [120, 130,  11],
              [140, 150,  12]]])
```

```
[22]: c.shape
```

```
[22]: (3,)
```

```
[24]: #item size -> to get byte size

a = np.array([2,4,5], dtype=float)
a.itemsize
```

```
[24]: 8
```