

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

```
In [2]: a=np.array([1,2,3])
```

```
In [4]: print(a)
```

```
[1 2 3]
```

```
In [11]: b=np.array([[1,2,3],[4,5,6]])  
print(b)
```

```
[[1 2 3]  
 [4 5 6]]
```

```
In [12]: #getdimension  
print(b.ndim)
```

```
2
```

```
In [14]: #getShape  
print(b.shape)
```

```
(2, 3)
```

```
In [16]: #get dtype  
print(b.dtype)
```

```
int32
```

```
In [22]: #change the dtype in numpy  
c=np.array([1,2,3],dtype="int16")  
print(c)  
print(c.dtype)  
print(c.itemsize)
```

```
[1 2 3]  
int16  
2
```

```
In [21]: d=np.array([1,2,3,4],dtype="int16")  
print(d.nbytes)  
print(d.size*d.itemsize)
```

```
8  
8
```

```
In [23]: e=np.array([1.0,2.0])  
print(e.dtype)  
print(e.nbytes)  
print(e.size)  
print(e.itemsize)
```

```
float64  
16  
2  
8
```

```
In [24]: e=np.array([1,2])  
print(e.dtype)  
print(e.nbytes)
```

```
print(e.size)
print(e.itemsize)
```

```
int32
8
2
4
```

In []: