

```
In [1]:  ▶ import numpy as np
```

```
In [2]:  ▶ a= np.array([[1,2,3],[4,5,6],[7,8,9]])
```

```
In [3]:  ▶ np.shape(a)
```

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

```
In [4]:  ▶ a.dtype
```

```
Out[4]: dtype('int32')
```

```
In [5]:  ▶ a[1]
```

```
Out[5]: array([4, 5, 6])
```

```
In [6]:  ▶ a[1,:]
```

```
Out[6]: array([4, 5, 6])
```

```
In [7]:  ▶ a[1,1:]
```

```
Out[7]: array([5, 6])
```

```
In [8]:  ▶ a[:,1,1:]
```

```
Out[8]: array([[2, 3]])
```

```
In [9]:  ▶ a.tolist()
```

```
Out[9]: [[1, 2, 3], [4, 5, 6], [7, 8, 9]]
```

```
In [10]: ▶ b=a[1,1:]
```

```
In [11]: ▶ b.fill(2)
```

```
In [12]: ▶ b
```

```
Out[12]: array([2, 2])
```

```
In [13]: ▶ np.abs(a)
```

```
Out[13]: array([[1, 2, 3],
                [4, 2, 2],
                [7, 8, 9]])
```

```
In [14]: ▶ np.min(a)
```

```
Out[14]: 1
```

```
In [15]:  ▶ c=np.array([[2,2,2],[2,2,2],[2,2,2]])
```

```
In [16]:  ▶ np.multiply(a,c)
```

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