

```
import numpy as np
y=np.array([[1,2],[3,4]])
print(y.min())
print(y.max())
print(y.argmin())
print(y.argmax())
```

1
4
0
3

```
print(np.any([True, False, False ]))
```

True

```
a=np.zeros((50,50))
print(np.any(a!=0))
```

False

```
x=np.arange(1,10)
print(np.mean(x))
```

5.0

```
print(np.median(x))
```

5.0

```
y=np.array([[1,2,3],[4,5,6]])
print(np.mean(y,axis=0))
print(np.mean(y,axis=1))
print(np.std(x))
```

[2.5 3.5 4.5]
[2. 5.]
2.581988897471611

```
data = np.loadtxt("/content/allpha.txt")
print(data)
data.shape
```

[[1.23455668e+13 3.45600000e+03]
 [1.23440000e+04 2.17676000e+05]
 [1.23340000e+04 3.21400000e+03]
 [2.34500000e+03 2.13000000e+02]]
(4, 2)

```
from IPython.display import Image
Image("/content/burger.jpg")
```



```
a=np.tile(np.arange(0,40,10),(3,1))
print(a)
print("*"*100)
```

```
a=a.T
print(a)
```

```
[[ 0 10 20 30]
 [ 0 10 20 30]
 [ 0 10 20 30]]
*****
[[ 0  0  0]
 [10 10 10]
 [20 20 20]
 [30 30 30]]
```

```
b=np.array([0,1,2])
print(b)
```

```
[0 1 2]
```

```
c=a+b
print(c)
```

```
[[ 0  1  2]
 [10 11 12]]
```

```
[20 21 22]
[30 31 32]]
```

```
a=np.arange(0,40,10)
print(a.shape)
a=a[:, np.newaxis]
print(a.shape)
```

```
(4,)
(4, 1)
```

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

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

```
print(a.T)
print(a.T.ravel())
```

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

```
b=a.ravel()
print(b.shape)
```

```
(6,)
```

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