

```
import numpy as np
a=np.array([1,2,3,4,5])
print(a)
```

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

```
import numpy as np
```

```
a=np.array([[1,2,3,4,5],[6,7,8,9,0],[2,4,6,7,8]])
print(a)
print(a[0][2])
print(a[1])
```

```
[[1 2 3 4 5]
 [6 7 8 9 0]
 [2 4 6 7 8]]
3
[6 7 8 9 0]
```

```
b=np.zeros(5)
print(b)
```

```
[0. 0. 0. 0. 0.]
```

```
b=np.ones(4)
print(b)
```

```
[1. 1. 1. 1.]
```

```
b=np.empty(5)
print(b)
```

```
[0. 0. 0. 0. 0.]
```

```
c=np.arange(20)
print(c)
```

```
[ 0  1  2  3  4  5  6  7  8  9 10 11 12 13 14 15 16 17 18 19]
```

```
a=np.arange(3,31,3)
print(a)
```

```
[ 3  6  9 12 15 18 21 24 27 30]
```

```
a=np.ones(2)
a
```

```
array([1., 1.])
```

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

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

```
a=np.array(['kru','abc','z','q'])
print(a)
a=np.sort(a)
print(a)
```

```
['kru' 'abc' 'z' 'q']
['abc' 'kru' 'q' 'z']
```

```
a=np.array([1,'kru',3,'abc','z','q'])
print(a)
a=np.sort(a)
print(a)
```

```
['1' 'kru' '3' 'abc' 'z' 'q']
['1' '3' 'abc' 'kru' 'q' 'z']
```

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

print(ar)
print("dimensions = ",a)
```

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

```
arr = np.array([[[1, 2, 3], [4, 5, 6]], [[11, 22, 33], [44, 55, 66]]])
a=arr.ndim
b=arr.size
print(arr)
print("dimensions = ", a)
print("size = ", b)
```

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

 [[11 22 33]
 [44 55 66]]]
dimensions = 3
size = 12
```

```
c=np.array([2])
a=np.array([1,2,3])
b=np.array([1,2],[3,4])
```

```
print(a)
print("dim = ",a.ndim)
print(b)
print("dim = ",b.ndim)
print(c)
print("dim = ",c.ndim)
```

```
[1 2 3]
dim = 1
[[1 2]
 [3 4]]
dim = 2
[2]
dim = 1
```

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

```
(2, 3)
```

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

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