
```
import numpy as np
```

✓ **np.empty((rows,cols),dtype)**

```
np.empty((4,4),dtype = int)

array([[ 95089002275195,           0,  736965739392562286,
        2314885530818453514],
       [7791359791290392608, 2314885530817006195, 8297073249806721056,
        8243107283012427896],
       [2675258504086167667, 7526676535825163123, 6998726256873206881,
        7163384644106155125],
       [7813871936801107041, 8031165433303495785, 3203312131590086944,
        10]])
```

np.ones(cols)

✓ **np.ones((rows,cols))**

np.ones((rows,cols),dtype)

```
np.ones(4)

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

```
np.ones((4,5))

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

```
np.ones((4,4),dtype = int)

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

```
np.ones((4,4),dtype = str)

array([[ '1', '1', '1', '1'],
       [ '1', '1', '1', '1'],
       [ '1', '1', '1', '1'],
       [ '1', '1', '1', '1']], dtype='<U1')
```

```
np.ones((4,4),dtype = bool)

array([[ True,  True,  True,  True],
       [ True,  True,  True,  True],
       [ True,  True,  True,  True],
       [ True,  True,  True,  True]])
```

np.zeros(cols)

✓ **np.zeros((rows,cols))**

np.zeros((rows,cols),dtype)

```
np.zeros(3)

array([0., 0., 0.])
```

```
np.zeros((4,4))
```

```
array([[0., 0., 0., 0.],
       [0., 0., 0., 0.],
       [0., 0., 0., 0.],
       [0., 0., 0., 0.]])

np.zeros((4,4),dtype = int)

array([[0, 0, 0, 0],
       [0, 0, 0, 0],
       [0, 0, 0, 0],
       [0, 0, 0, 0]])

np.zeros((4,4),dtype = str)

array([[', ', ', '],
       [', ', ', '],
       [', ', ', '],
       [', ', ', ']], dtype='<U1')

np.zeros((4,4),dtype = bool)

array([[False, False, False, False],
       [False, False, False, False],
       [False, False, False, False],
       [False, False, False, False]])
```