

```
In [1]: def greeting(name):  
        print("Hello "+ name)  
        greeting("arsal")
```

Hello arsal

```
In [2]: import greet
```

```
In [3]: def greeting(name):  
        print("Hello "+ name)  
        greeting("arsal")
```

Hello arsal

```
In [5]: greet.greeting("aaa")
```

Hello aaa

```
In [6]: from greet import greeting
```

```
In [7]: greeting("rrr")
```

Hello rrr

```
In [8]: import greet as g
```

```
In [9]: g.greeting("arslllll")
```

Hello arsl1111

```
In [12]: import numpy
```

```
In [14]: array = numpy.array([1,2,3,4,5])  
print(array)
```

[1 2 3 4 5]

```
In [15]: import numpy as np
```

```
In [16]: array=np.array([5,4,3,2,1])  
print (array)
```

[5 4 3 2 1]

```
In [17]: import numpy as np
```

```
In [18]: a=np.array(["arsal","hamzx","kumail","ali"])
print(a.dtype)
b=np.array(["12","22","34","55"])
print(b.dtype)
```

```
<U6
<U2
```

```
In [24]: c=np.array([1,2,3,4,5]),dtype="i")
print(c.dtype)
```

```
File "<ipython-input-24-a9a0d8bd83dc>", line 1
```

```
    c=np.array([1,2,3,4,5]),dtype="i")
                                ^
```

```
SyntaxError: unmatched ')'
```

```
In [33]: d = np.array(["1.5","2.5","9.8","5.8"] , dtype="f")
print(d)
```

```
[1.5 2.5 9.6 5.8]
```

```
In [35]: e=d.astype(int)
print(e)
```

```
[1 2 9 5]
```

```
In [36]: f=d.astype(bool)
print(f)
```

```
[ True  True  True  True]
```

```
In [37]: f=d.copy()
f[0]=34
print(d)
print(f)
```

```
[1.5 2.5 9.6 5.8]
[34.   2.5  9.6  5.8]
```

```
In [38]: f=d.view()
f[0]=34
print(d)
print(f)
```

```
[34.   2.5  9.6  5.8]
[34.   2.5  9.6  5.8]
```

```
In [39]: f=d
```

```
In [40]: print(e.base)
print(f.base)
print(d.base)
```

None

None

None

```
In [47]: k=np.array([[2,3,8],
                    [3,5,7],
                    [6,8,9]])
print(k.shape)
```

(3, 3)

```
In [64]: m = np.array([12,4,5,7,8,9,6,4,])
l = m.reshape(2,2,2)
print(m)
print(l)
print(m.shape)
print(m.ndim)
```

[12 4 5 7 8 9 6 4]

[[[12 4]
 [5 7]]

[[8 9]
 [6 4]]]

(8,)

1

```
In [65]: m = np.array([12,4,5,7,8,9,6,4,33])
l = m.reshape(3,3)
print(m)
print(l)
print(m.shape)
print(m.ndim)
```

[12 4 5 7 8 9 6 4 33]

[[12 4 5]
 [7 8 9]
 [6 4 33]]

(9,)

1

```
In [68]: m = np.array([12,4,5,7,8,9,6,4])
l = m.reshape(2,2,2)
w=l.reshape(-1)
print(m)
print(l)
print(w)
print(l.shape)
print(l.ndim)
print(w.shape)
print(w.ndim)
```

```
[12  4  5  7  8  9  6  4]
```

```
[[[12  4]
   [ 5  7]]]
```

```
[[ 8  9]
 [ 6  4]]]
```

```
[12  4  5  7  8  9  6  4]
```

```
(2, 2, 2)
```

```
3
```

```
(8,)
```

```
1
```

```
In [80]: z=np.array([range(100)])  
r=z.reshape(5,5,4)  
  
print(r)
```

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

```
[[20 21 22 23]  
 [24 25 26 27]  
 [28 29 30 31]  
 [32 33 34 35]  
 [36 37 38 39]]
```

```
[[40 41 42 43]  
 [44 45 46 47]  
 [48 49 50 51]  
 [52 53 54 55]  
 [56 57 58 59]]
```

```
[[60 61 62 63]  
 [64 65 66 67]  
 [68 69 70 71]  
 [72 73 74 75]  
 [76 77 78 79]]
```

```
[[80 81 82 83]  
 [84 85 86 87]  
 [88 89 90 91]  
 [92 93 94 95]  
 [96 97 98 99]]]
```

```
In [ ]:
```