```
In [1]:  #Sorting the data of ndarray
         import numpy as np
```

```
In [2]:  a=np.array([[10,15,25],[35,14,12],[36,28,19]])
         print(a,type(a),a.shape)
```

```
[[10 15 25]
 [35 14 12]
 [36 28 19]] <class 'numpy.ndarray'> (3, 3)
```

```
In [4]:  a.shape=(9,)
         print(a)
```

```
[10 15 25 35 14 12 36 28 19]
```

```
In [5]:  np.sort(a)
```

```
Out[5]:  array([10, 12, 14, 15, 19, 25, 28, 35, 36])
```

```
In [7]:  np.sort(a)[::-1]
```

```
Out[7]:  array([36, 35, 28, 25, 19, 15, 14, 12, 10])
```

```
In [8]:  a=np.array([[10,15,25],[35,14,12],[36,28,19]])
         print(a,type(a),a.shape)
```

```
[[10 15 25]
 [35 14 12]
 [36 28 19]] <class 'numpy.ndarray'> (3, 3)
```

```
In [12]:  np.sort(a) # By default row-wise sorting
```

```
Out[12]:  array([[10, 15, 25],
                 [12, 14, 35],
                 [19, 28, 36]])
```

```
In [11]:  a=np.array([[10,15,25],[35,14,12],[36,28,19]])
          print(a,type(a),a.shape)
```

```
[[10 15 25]
 [35 14 12]
 [36 28 19]] <class 'numpy.ndarray'> (3, 3)
```

```
In [13]:  np.sort(a,axis=1) # row-wise sorting
```

```
Out[13]:  array([[10, 15, 25],
                 [12, 14, 35],
                 [19, 28, 36]])
```

```
In [16]:  a=np.array([[10,15,25],[35,14,12],[36,28,19]])
          print(a,type(a),a.shape)
```

```
[[10 15 25]
 [35 14 12]
 [36 28 19]] <class 'numpy.ndarray'> (3, 3)
```

```
In [17]:  np.sort(a,axis=0) # column-wise sorting
```

```
Out[17]:  array([[10, 14, 12],
                 [35, 15, 19],
                 [36, 28, 25]])
```

```
In [18]:  a=np.array([[10,15,25],[35,14,12],[36,28,19],[11,75,22]])
          print(a,type(a),a.shape)
```

```
[[10 15 25]
 [35 14 12]
 [36 28 19]
 [11 75 22]] <class 'numpy.ndarray'> (4, 3)
```

```
In [19]:  a.shape=(2,3,2)
          print(a)
```

```
[[[10 15]
  [25 35]
  [14 12]]

 [[36 28]
  [19 11]
  [75 22]]]
```

```
In [20]:  np.sort(a)
```

```
Out[20]:  array([[[10, 15],
                  [25, 35],
                  [12, 14]],

                 [[28, 36],
                  [11, 19],
                  [22, 75]]])
```

```
In [21]:  a=np.array([[10,15,25],[35,14,12],[36,28,19],[11,75,22]])
          a.shape=(2,3,2)
          print(a)
```

```
[[[10 15]
  [25 35]
  [14 12]]

 [[36 28]
  [19 11]
  [75 22]]]
```

```
In [23]: x=np.sort(a[0],axis=0)
         y=np.sort(a[1],axis=0)
```

```
In [24]: print(x)
         print(y)
```

```
[[10 12]
 [14 15]
 [25 35]]
[[19 11]
 [36 22]
 [75 28]]
```

```
In [25]: a=np.array([[10,15,25],[35,14,12],[36,28,19],[11,75,22]])
         a.shape=(2,3,2)
         print(a)
```

```
[[[10 15]
  [25 35]
  [14 12]]

 [[36 28]
  [19 11]
  [75 22]]]
```

```
In [26]: x=np.sort(a[0],axis=1)
         y=np.sort(a[1],axis=1)
         print(x)
         print(y)
```

```
[[10 15]
 [25 35]
 [12 14]]
[[28 36]
 [11 19]
 [22 75]]
```

```
In [ ]:
```