Sorting the date of the NDArray by using sort()

In [1]:
```
import numpy as np
a=np.array([12,5,6,45,12,78,15,22,19])
print(a,type(a))
```

```
[12  5  6 45 12 78 15 22 19] <class 'numpy.ndarray'>
```

In [2]:
```
np.sort(a)
```

Out[2]:
```
array([ 5,  6, 12, 12, 15, 19, 22, 45, 78])
```

In [3]:
```
a
```

Out[3]:
```
array([12,  5,  6, 45, 12, 78, 15, 22, 19])
```

In [4]:
```
a=np.sort(a)
```

In [5]:
```
print(a,type(a))
```

```
[ 5  6 12 12 15 19 22 45 78] <class 'numpy.ndarray'>
```

In [6]:
```
print(a[::-1]) # for reversing the sorted value from ascending to descending
```

```
[78 45 22 19 15 12 12  6  5]
```

In [9]:
```
a
```

Out[9]:
```
array([ 5,  6, 12, 12, 15, 19, 22, 45, 78])
```

In [8]:
```
b= a[::-1]
b
```

Out[8]:
```
array([78, 45, 22, 19, 15, 12, 12,  6,  5])
```

In [12]:
```
a=np.array([12,5,6,45,12,78,15,22,19])
a.shape=(3,3)
a
```

Out[12]:
```
array([[12,  5,  6],
       [45, 12, 78],
       [15, 22, 19]])
```

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

Out[13]:
```
array([[ 5,  6, 12],
       [12, 45, 78],
       [15, 19, 22]])
```

In [15]:
```
a
```

Out[15]:
```
array([[12,  5,  6],
       [45, 12, 78],
       [15, 22, 19]])
```

In [14]:
```
np.sort(a,axis=1)
```

Out[14]:
```
array([[ 5,  6, 12],
       [12, 45, 78],
       [15, 19, 22]])
```

In [16]:
```
np.sort(a,axis=0) #column wise sorting where coulmn is axis =0
```

Out[16]:
```
array([[12,  5,  6],
       [15, 12, 19],
       [45, 22, 78]])
```

In [19]:
```
a.shape=(9,)
a
```

Out[19]:
```
array([12,  5,  6, 45, 12, 78, 15, 22, 19])
```

In [22]:
```
a=np.sort(a)
a
```

Out[22]:
```
array([ 5,  6, 12, 12, 15, 19, 22, 45, 78])
```

In [23]:
```
a=np.sort(a[::-1])
a
```

Out[23]:
```
array([ 5,  6, 12, 12, 15, 19, 22, 45, 78])
```

In [ ]: