

```
In [1]: import numpy as np
        from pandas import Series, DataFrame
        import pandas as pd
```

```
In [4]: #Sorting by index
        ser1 = Series(range(3), index=['C', 'A', 'B'])

        #show
        ser1
```

```
Out[4]: C    0
        A    1
        B    2
        dtype: int64
```

```
In [5]: #Now sort_index
        ser1.sort_index()
```

```
Out[5]: A    1
        B    2
        C    0
        dtype: int64
```

```
In [6]: #Can sort a Series by its values
        ser1.order()
```

```
Out[6]: C    0
        A    1
        B    2
        dtype: int64
```

```
In [10]: #Lets see how ranking works

        from numpy.random import randn
        ser2 = Series(randn(10))

        #Show
        ser2
```

```
Out[10]: 0    0.524553
        1   -1.987343
        2   -0.883902
        3   -0.875829
        4    0.216089
        5    0.744837
        6   -0.761465
        7    0.792798
        8   -0.144650
        9    0.100972
        dtype: float64
```

```
In [11]: #This will show you the rank used if you sort the series  
ser2.rank()
```

```
Out[11]: 0      8  
        1      1  
        2      2  
        3      3  
        4      7  
        5      9  
        6      4  
        7     10  
        8      5  
        9      6  
dtype: float64
```

```
In [13]: #Lets sort it now  
ser2.sort()  
  
#Show  
ser2
```

```
Out[13]: 1   -1.987343  
        2   -0.883902  
        3   -0.875829  
        6   -0.761465  
        8   -0.144650  
        9    0.100972  
        4    0.216089  
        0    0.524553  
        5    0.744837  
        7    0.792798  
dtype: float64
```

```
In [15]: #After sorting let's check the rank and see iof it makes sense  
ser2.rank()
```

```
Out[15]: 1      1  
        2      2  
        3      3  
        6      4  
        8      5  
        9      6  
        4      7  
        0      8  
        5      9  
        7     10  
dtype: float64
```

```
In [16]: #On the left column we see th original index value and on the right we see it's r
```

```
In [ ]: #Next we'll learn about using descriptive statistics on dataframes!
```

