

```
import pandas as pd
import numpy as np
```

```
unsorted_df=pd.DataFrame(np.random.randn(10,2),index=[1,4,6,2,3,5,9,8,0,7],columns=['col2'
print (unsorted_df)
```

```

      col2      col1
1  0.913128  0.081915
4 -0.328863 -0.489836
6 -1.594307 -0.593405
2  0.528177 -0.856575
3 -0.050915 -0.455283
5 -1.139970 -0.674288
9  1.474698 -1.498965
8 -0.091276  2.011179
0 -0.400313 -0.001199
7 -1.110921  0.439724
```

```
unsorted_df=pd.DataFrame(np.random.randn(10,2),index=[1,2,3,4,5,6,7,8,9,0],columns=['col2'
print (unsorted_df)
```

```

      col2      col1
1 -0.986278  0.257782
2 -0.687429 -1.052693
3  1.668525 -0.396087
4  0.398526 -0.431920
5  1.574015 -0.406583
6  0.886396  1.362975
7 -0.515176 -0.554104
8  0.442157 -0.298302
9  1.245937  1.092182
0  0.764796  0.152566
```

```
unsorted_df = pd.DataFrame(np.random.randn(10,2),index=[1,4,6,2,3,5,9,8,0,7],columns = ['c
```

```
sorted_df=unsorted_df.sort_index()
print (sorted_df)
```

```

      col2      col1
0  2.044425 -0.345792
1 -1.756713 -1.376890
2 -0.657593 -0.497028
3 -0.771049 -0.090823
4 -0.605273 -1.089765
5 -0.944878 -0.284704
6 -0.921078  1.062697
7 -1.239318  1.110466
8 -1.800563 -0.353022
9 -1.579536  1.230823
```

```
unsorted_df = pd.DataFrame(np.random.randn(10,2),index=[1,4,6,2,3,5,9,8,0,7],columns = ['c
```

```
sorted_df = unsorted_df.sort_index(ascending=False)
print (sorted_df)
```

	col2	col1
9	1.135397	-0.075706
8	-1.854441	-0.782001
7	0.877665	2.715295
6	0.529650	-0.769114
5	-0.975184	-1.640942
4	-0.522687	-1.460191
3	0.186618	0.398267
2	-1.346799	-0.666429
1	0.772252	-0.531953
0	-2.101650	-1.018339

```
unsorted_df = pd.DataFrame(np.random.randn(10,2),index=[1,4,6,2,3,5,9,8,0,7],columns = ['c
```

```
sorted_df = unsorted_df.sort_index(ascending=True)
print (sorted_df)
```

	col2	col1
0	0.912582	0.849074
1	-1.320151	1.854702
2	2.326984	-1.217848
3	-2.558297	-0.393853
4	0.004605	-0.874987
5	0.220866	0.508212
6	-0.587726	-0.031942
7	0.272449	3.313633
8	0.437652	-0.556858
9	0.050343	0.361540

```
unsorted_df = pd.DataFrame(np.random.randn(10,2),index=[1,4,6,2,3,5,9,8,0,7],columns = ['c
```

```
sorted_df = unsorted_df.sort_index(descending=True)
print (sorted_df)
```

```
-----
TypeError                                Traceback (most recent call last)
<ipython-input-12-bcf4566a6ed7> in <module>()
      1 unsorted_df = pd.DataFrame(np.random.randn(10,2),index=
[1,4,6,2,3,5,9,8,0,7],columns = ['col2','col1'])
      2
----> 3 sorted_df = unsorted_df.sort_index(descending=True)
      4 print (sorted_df)
```

```
TypeError: sort_index() got an unexpected keyword argument 'descending'
```

SEARCH STACK OVERFLOW

```
unsorted_df = pd.DataFrame(np.random.randn(10,2),index=[1,3,5,7,9,2,4,6,8,0],columns = ['c
```

```
sorted_df=unsorted_df.sort_index(axis=1)
```

```
print (sorted_df)
```

	col1	col2
1	1.051888	1.660124
3	1.616773	-0.811375

```

5  1.083622  0.228159
7 -0.864898 -0.613640
9  0.554985 -0.160541
2 -1.636051 -1.944098
4  0.744565  0.355665
6 -1.014580  0.978450
8 -0.625779 -0.014666
0  0.175469 -1.270354

```

```

unsorted_df = pd.DataFrame({'col1':[2,1,2,1], 'col2':[1,3,2,6]})
sorted_df = unsorted_df.sort_values(by='col1')

```

```
print (sorted_df)
```

```

      col1  col2
1         1     3
3         1     6
0         2     1
2         2     2

```

```

unsorted_df = pd.DataFrame({'col1':[2,1,2,1,3], 'col2':[1,3,2,4,5]})
sorted_df = unsorted_df.sort_values(by=['col1', 'col2'])

```

```
print (sorted_df)
```

```

      col1  col2
1         1     3
3         1     4
0         2     1
2         2     2
4         3     5

```

```

unsorted_df = pd.DataFrame({'col1':[2,1,1,1], 'col2':[1,3,2,4]})
sorted_df = unsorted_df.sort_values(by='col1' ,kind='mergesort')

```

```
print (sorted_df)
```

```

      col1  col2
1         1     3
2         1     2
3         1     4
0         2     1

```

