

How can I sort a Pandas DataFrame alphabetically?

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To sort a Pandas DataFrame alphabetically, you can use the "sort_values()" function. This function allows you to specify the column(s) you want to sort by and the order in which you want them to be sorted. By default, the function sorts the data in ascending order. However, you can also specify "ascending=False" to sort the data in descending order. This method is useful for organizing data in a DataFrame based on alphabetical order, making it easier to identify patterns and relationships within the data.

Pandas: Sort DataFrame Alphabetically

You can use the following methods to sort the rows of a pandas DataFrame alphabetically:

Method 1: Sort by One Column Alphabetically

#sort A to Z

```
df.sort_values('column1')
```

#sort Z to A

```
df.sort_values('column1', ascending=False)
```

Method 2: Sort by Multiple Columns Alphabetically

#sort by column1 from Z to A, then by column2 from A to Z

```
df.sort_values(, ascending=(False, True))
```

The following example shows how to use each method in practice.

Example 1: Sort by One Column Alphabetically

Suppose we have the following pandas DataFrame:

```
import pandas as pd
```

```
#create DataFrame
```

```
df = pd.DataFrame({'team': ,  
'points': })
```

```
#view DataFrame
```

```
print(df)
```

```
team points
```

```
0 Mavs 120
```

```
1 Spurs 108
```

```
2 Lakers 99
```

```
3 Nuggets 104
```

```
4 Hawks 115
```

We can use the following syntax to sort the rows of the DataFrame by team name from A to Z:

```
#sort by team name A to Z
```

```
df_sorted = df.sort_values('team')
```

```
#view sorted DataFrame
```

```
print(df_sorted)
```

```
team points
```

```
4 Hawks 115
```

```
2 Lakers 99
```

```
0 Mavs 120
```

```
3 Nuggets 104
```

```
1 Spurs 108
```

Notice that the rows are now sorted by team name from A to Z.

We could also sort from Z to A:

```
#sort by team name Z to A
```

```
df_sorted = df.sort_values('team', ascending=False)
```

```
#view sorted DataFrame
```

```
print(df_sorted)
```

```
team points
```

```
1 Spurs 108
```

```
3 Nuggets 104
```

```
0 Mavs 120
```

2 Lakers 99

4 Hawks 115

And we could also use the `reset_index()` function to reset the index values in the sorted DataFrame:

```
#sort by team name A to Z and reset index
df_sorted = df.sort_values('team').reset_index(drop=True)
```

```
#view sorted DataFrame
print(df_sorted)
```

team points

0 Hawks 115

1 Lakers 99

2 Mavs 120

3 Nuggets 104

4 Spurs 108

Example 2: Sort by Multiple Columns Alphabetically

```
import pandas as pd
```

```
#create DataFrame
```

```
df = pd.DataFrame({'conference': ,
```

```
'team': ,  
'points': })
```

```
#view DataFrame  
print(df)
```

```
conference team points  
0 West Mavs 120  
1 West Spurs 108  
2 West Lakers 99  
3 East Heat 104  
4 East Hawks 115
```

We can use the following syntax to sort the rows of the DataFrame by conference name from A to Z, then by team name from Z to A:

```
#sort by conference name A to Z, then by team name Z  
to A  
df_sorted = df.sort_values(, ascending=(True, False))
```

```
#view sorted DataFrame  
print(df_sorted)
```

```
conference team points
```

3 East Heat 104
4 East Hawks 115
1 West Spurs 108
0 West Mavs 120
2 West Lakers 99

The rows are sorted by conference name from A to Z, then by team name from Z to A.

Note: You can find the complete documentation for the pandas `sort_values()` function .

Additional Resources

The following tutorials explain how to perform other common operations in pandas: