

PANDAS SORT VALUES

SHARP SIGHT

WHAT YOU'LL LEARN

- How to use the Pandas `sort_values()` method
- How to sort the rows of a DataFrame
 - sort in ascending order
 - sort in descending order

PANDAS SORT VALUES OVERVIEW

EXAMPLE: YOU HAVE A PANDAS DATAFRAME WITH THE ROWS OUT OF ORDER

model	make	year	horsepower	weight
911 Turbo	Porsche	2013	513 4	1.67
Z4 3.0i	BMW	2007	215 1	1.36
Cayman	Porsche	2007	241 2	1.3
Veyron	Bugatti	2012	1184 5	1.84
550i	BMW	2013	444 3	1.9

THE PANDAS SORT_VALUES() METHOD

SORTS ROWS BY A VARIABLE

```
supercars.sort_values('horsepower')
```

model	make	year	horsepower	weight
Z4 3.0i	BMW	2007	215 1	1.36
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PANDAS SORT VALUES SYNTAX

SYNTAX: PANDAS SORT VALUES

The name of the DataFrame you want to operate on

The name of the method (called with "dot" syntax)

```
myDataFrame.sort_values(by=var, ascending= )
```

The variable that you want to sort by

This can be a single variable or a list of variables

True or False value that specifies if you want to sort the data in ascending order

Default is `True`

PARAMETERS OF PANDAS SORT VALUES

THE PARAMETERS OF PANDAS SORT VALUES

Parameter	What it does	Values	Default
<code>ascending=</code>	Specifies whether <code>sort_values</code> will sort in ascending order or descending order	True or False	True
<code>inplace=</code>	Specifies whether <code>sort_values</code> will directly modify the DataFrame or produce a new DataFrame	True or False	False
<code>kind=</code>	Specifies the sorting algorithm to use	quicksort mergesort heapsort	quicksort

Note, there are some other parameters, but they are rarely used, so we won't cover them

Also note: it's technically possible to sort the columns as well with parameter `axis = 1`, but this is very uncommon

THE OUTPUT OF PANDAS SORT VALUES

- By default, `sort_values()` will produce a *new* DataFrame
 - by default, `inplace` is set to `inplace = False`
- If you set `inplace = True`, `sort_values()` will directly modify the original DataFrame

RECAP

RECAP OF WHAT WE LEARNED

- How to use the Pandas `sort_values()` method
- How to sort Pandas DataFrames
 - sort ascending
 - sort descending
- **Next Steps:** Watch the code walkthrough video about `sort_values()` for step-by-step examples