PANDAS MELT

WHAT YOU'LL LEARN

- How to use the melt () method in Pandas
- How to reshape or "transpose" your data
 - reshape from wide to long
 - "unpivot" your data

AN OVERVIEW OF PANDAS MELT

EXAMPLE: YOU HAVE A DATAFRAME

ind_var	A	В	С
1	val 1	val 3	val 5
2	val 2	val 4	val 6

YOU NEED TO RESHAPE THE DATA FROM "WIDE" FORMAT TO "LONG" FORMAT

ind_var	A	В	С
1	val 1	val 3	val 5
2	val 2	val 4	val 6

MELT "RESHAPES" DATA FROM WIDE TO LONG

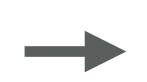
```
df_wide.melt(id_vars = ['ind_var'] , value_vars = ['A','B','C'])
```

ind_var	A	В	С
1	val 1	val 3	val 5
2	val 2	val 4	val 6

MELT "RESHAPES" DATA FROM WIDE TO LONG

```
df_wide.melt(id_vars = ['ind_var'] , value_vars = ['A','B','C'])
```

ind_var	A	В	С
1	val 1	val 3	val 5
2	val 2	val 4	val 6

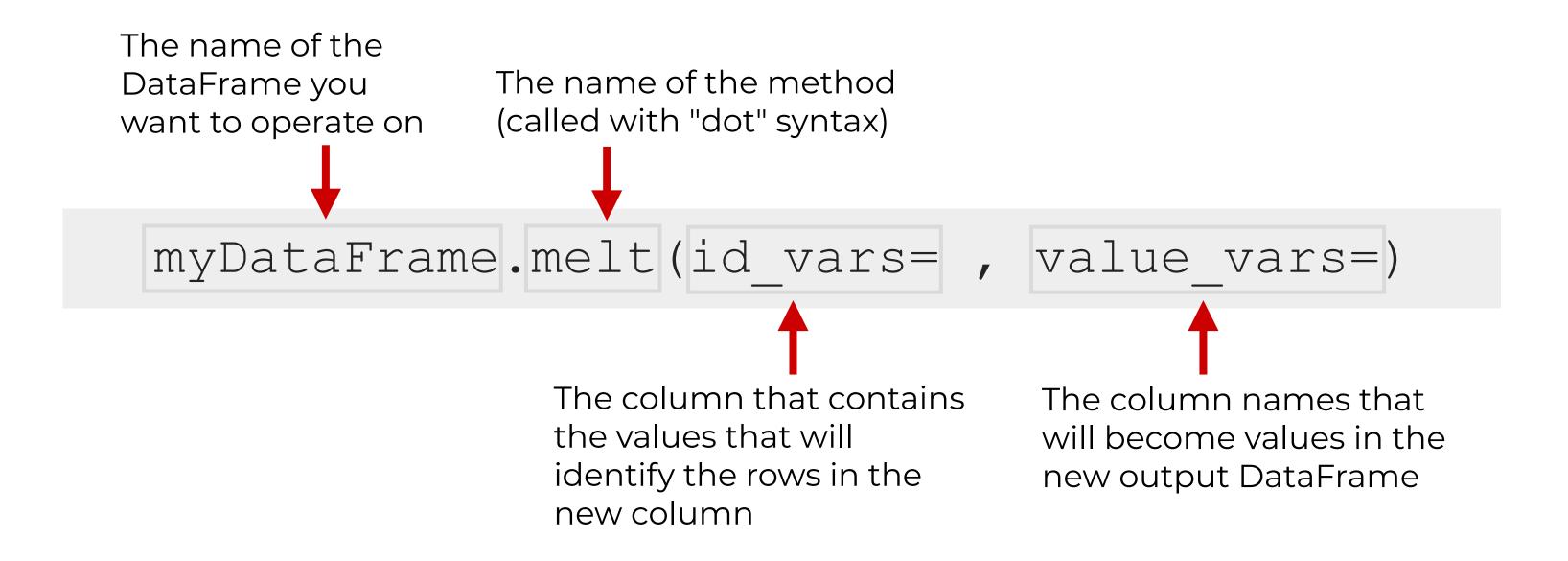


ind_var	variable	value
1	A	val 1
2	A	val 2
1	В	val 3
2	В	val 4
1	С	val 5
2	С	val 6

This operation is sometimes called a "transpose"

PANDAS MELT SYNTAX

SYNTAX: PANDAS MELT



PARAMETERS OF PANDAS MELT

THE PARAMETERS OF PANDAS MELT

Parameter	What it does	Format
id_vars=	The column that contains the values that will identify the rows in the new column	List of column names
value_vars=	The column names that will become values in the new output DataFrame	List of column names
var_name=	The name for the new "categorical" variable that's being created from value_vars	string
value_name=	The name for the "values" column in the output DataFrame	string

THE OUTPUT OF PANDAS MELT

- The melt () method will produce a new DataFrame as output
 - a reshaped DataFrame
 - reshaped from wide to long

RECAP

RECAP OF WHAT WE LEARNED

- You can reshape your Pandas data with melt()
 - reshape from wide to long
- Note: melt() is a little hard to understand!
 - the best way to understand it is to work with some simple examples
- **Next Steps**: Watch the code walkthrough video for simple, step-by-step examples of the Pandas melt () method