Pandas concat

SHARP SIGHT

What you'll learn

- How to use the Pandas `concat` function

- How to combine or "stack" DataFrames vertically

Pandas concat overview

Pandas concat combines dataframes

```
pd.concat([dataset1, dataset2])
```

dataset1

region	quarter	revenue
Europe	Q1	65000
North America	Q1	60000

dataset2

region	quarter	revenue
Europe	Q2	62000
North America	Q2	63000

Pandas concat combines DataFrames

```
pd.concat([dataset1, dataset2])
```

region	quarter	revenue
Europe	Q1	65000
North America	Q1	60000
Europe	Q2	62000
North America	Q2	63000

Pandas `concat` combines the input DataFrames

Pandas concat combines dataframes

```
pd.concat([dataset1, dataset2])
```

region	quarter	revenue
Europe	Q1	65000
North America	Q1	60000
Europe	Q2	62000
North America	Q2	63000

Note that the data are combined *vertically* by default.

We rarely combine them horizontally using concat

Pandas concat syntax

Syntax: pandas concat function

The name of the function

```
pd.concat([dataset1, dataset2, …])
```

The name of the DataFrames that you want to combine, enclosed inside of a list

Note: unlike many other Pandas functions, Pandas `concat` does not have a corresponding method syntax.

Parameters of Pandas concat

The parameters of Pandas concat

Input	What it does
`list-of-datasets`	Specifies the datasets we want to combine
`ignore_index`	If set to `True`, concat will ignore the index of each DataFrame, and create a new range index starting at0

Note: Pandas `concat` has many other parameters.
many of them are rarely used, so we wont cover them here

The output of Pandas concat

- The Pandas `concat` method returns a DataFrame with the combined data

- Note: concat also works on Pandas Series objects
  - We aren't going to use `concat` in that way in these lessons

Recap

Recap of what we learned

- You can use Pandas `concat` to combine (i.e., stack) data
  - Pandas concat also works horizontally
  - The horizontal use case is rare, so we won't work with it

- **Next Steps**: View the code walkthrough for clear examples of Pandas `concat`