Transforming Data With Pandas: Takeaways



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Syntax

APPLYING FUNCTIONS ELEMENT-WISE

• Apply a function element-wise to a series:

```
df[col_name].apply(function_name)

df[col_name].map(function_name)
```

• Apply a function element-wise to a dataframe:

```
df.applymap(function_name)
```

APPLYING FUNCTIONS ALONG AN AXIS

• Apply a function along an axis, column-wise:

```
df.apply(function name)
```

RESHAPING DATAFRAMES

• Reshape a dataframe:

```
pd.melt(df, id vars=[col1, col2], value vars=[col3, col4])
```

Concepts

- The Series.apply() and Series.map() methods can be used to apply a function element-wise to a series. The DataFrame.applymap() method can be used to apply a function element-wise to a dataframe.
- The <code>DataFrame.apply()</code> method has different capabilities than the <code>Series.apply()</code> method. Instead of applying functions element-wise, the <code>df.apply()</code> method applies functions along an axis, either column-wise or row-wise. When we create a function to use with <code>df.apply()</code>, we set it up to accept a Series, most commonly a column.
- Use the apply() method when a vectorized function does not exist because a vectorized function can perform an equivalent task faster than the apply() method. Sometimes, it may be necessary to reshape a dataframe to use a vectorized method.

Resources

• Tidy Data