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 elementwise 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



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