## Data Cleaning Walkthrough: Combining the Data: Takeaways

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## **Syntax**

• Resetting the index:

```
class_size.reset_index(inplace=True)
```

• Grouping a dataframe by column:

```
class_size=class_size.groupby("DBN")
```

• Aggregating a grouped Dataframe:

```
class_size = class_size.agg(numpy.mean)
```

• Displaying column types:

```
data["ap_2010"].dtypes
```

• Performing a left join:

```
combined.merge(data["ap_2010"], on="DBN", how="left")
```

• Displaying the shape of the dataframe (row, column):

```
combined.shape
```

• Performing an inner join:

```
combined = combined.merge(data[class_size], on="DBN", how="inner")
```

• Filling in missing values:

```
combined.fillna(0)
```

## Concepts

Merging data in Pandas supports four types of joins -- left , right , inner , and outer .

- Each of the join types dictates how pandas combines the rows.
- The strategy for merging affects the number of rows we end up with.
- We can use one or multiple aggregate functions on a grouped dataframe.

## Resurces

- Data Cleaning with Python
- <u>Dataframe.groupby()</u>
- agg() documentation



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