

4.13.2 Create a DataFrame for the Scores by School Type

Based on how quickly you're generating this data, you're working like a seasoned data analyst! There are just a few more steps you need to complete. Get ready to create the final DataFrame!

We're going to create a new DataFrame called `type_summary_df` that includes average math and reading scores, the average percentage of students who passed math and reading, and the average overall percentage.

Create the School Type DataFrame

Based on the work you've done so far, complete the following activity.



Calculating score. This might take a while. Please wait...

Your assignment has been successfully submitted.

To create the type summary DataFrame, add the following code to a new cell and run the cell.

```
# Assemble into DataFrame.
type_summary_df = pd.DataFrame({
    "Average Math Score" : type_math_scores,
    "Average Reading Score": type_reading_scores,
    "% Passing Math": type_passing_math,
    "% Passing Reading": type_passing_reading,
    "% Overall Passing": type_overall_passing})

type_summary_df
```

The results in the output window will look like this:

type_summary_df					
	Average Math Score	Average Reading Score	% Passing Math	% Passing Reading	% Overall Passing
School Type					
Charter	83.473852	83.896421	93.620830	96.586489	90.432244
District	76.956733	80.966636	66.548453	80.799062	53.672208

We're almost done! Like the previous DataFrames, this new DataFrame needs to adhere to grade-reporting standards. Therefore, we'll make the following formatting changes:

- Format the average math and reading scores to one decimal place
- Format the percentage of students passing math and reading to the nearest whole number
- Format the overall passing percentage to the nearest whole number

Format the DataFrame

To format the `type_summary_df` DataFrame, add the following code to a new cell and run the cell.

```
# Formatting
type_summary_df["Average Math Score"] = type_summary_df["Average Math Score"]
type_summary_df["Average Reading Score"] = type_summary_df["Average Reading Score"]
type_summary_df["% Passing Math"] = type_summary_df["% Passing Math"].map("{:.1f}%")
type_summary_df["% Passing Reading"] = type_summary_df["% Passing Reading"].map("{:.1f}%")
type_summary_df["% Overall Passing"] = type_summary_df["% Overall Passing"].map("{:.1f}%")
type_summary_df
```

The results should look like the following:

type_summary_df					
School Type	Average Math Score	Average Reading Score	% Passing Math	% Passing Reading	% Overall Passing
Charter	83.5	83.9	94	97	90
District	77.0	81.0	67	81	54

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