

4.11.4 Create a DataFrame for the Scores by School Spending

Your next task is to create a new DataFrame for the average math and reading scores, average percentage of students who passed math and reading, and the average overall percentage of passing students. You take a break to stretch your legs and grab a cup of coffee. You're feeling pretty confident about this next task, since you've done it a few times already.

Now that we have the average math and reading scores, the average percentage of students who passed math and reading, and the average overall percentage as a Series, let's add this data to a new DataFrame.

REWIND

To add a list or Series to a DataFrame, use the following format:

```
df = pd.DataFrame({"column name": column values})
```

Create the Spending Summary DataFrame

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

```
# Assemble into DataFrame.
spending_summary_df = pd.DataFrame({
    "Average Math Score" : spending_math_scores,
    "Average Reading Score": spending_reading_scores,
    "% Passing Math": spending_passing_math,
    "% Passing Reading": spending_passing_reading,
    "% Overall Passing": overall_passing_spending})

spending_summary_df
```

When we run the cell, results in the output window will look like this:



Nice work! But we need to get our DataFrame to adhere to grade-reporting standards by following certain formatting. We need to apply the following changes:

- Format the average math and reading scores to one decimal place
- Format the percent 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 `spending_summary_df` DataFrame, add the following code to a new cell and run the cell:

```
# Formatting
spending_summary_df["Average Math Score"] = spending_summary_df["Average Mat
spending_summary_df["Average Reading Score"] = spending_summary_df["Average
spending_summary_df["% Passing Math"] = spending_summary_df["% Passing Math"
spending_summary_df["% Passing Reading"] = spending_summary_df["% Passing Re
spending_summary_df["% Overall Passing"] = spending_summary_df["% Overall Pa
spending_summary_df
```

The formatted `spending_summary_df` DataFrame should look like this:



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