**PyCitySchools Challenge**

**Overview**

The school board notified Maria and her supervisor of academic dishonesty based on the students\_complete file that was given to them. In this analysis, we are to replace the Math and reading scores for Thomas High School with NaNs while attempting not to alter the data. If data is altered, we’ll analyze the changes and the overall effect the change in Math and Reading scores has on the file.

**Results**

In the first deliverable, we used the loc method to select all the reading scores from the 9th grade at Thomas High School. Then, we refactored the code to replace the math scores with Nan. After refactoring the code, NaN replaced the reading and math scores for the ninth graders, as displayed in the image below

Graphical user interface, text

Description automatically generated

In the second deliverable, we repeated the methods used in module 4 lesson to get the values for the district summary, school summary, math and reading scores for Thomas High school. For the second deliverable, 74.8% passed math, 85.7% passed Reading and the overall Passing score was 64.1%.

Graphical user interface, application

Description automatically generated

There was no significant change to the district and school summary. However, I noticed that the 64.1% for the overall passing differed slightly from the screenshot provided in the Module 4 Challenge, which displayed 64.9%. I went over my code and ran the previous codes again. I adjusted some codes but still got the 64.1% for overall passing for Thomas High School. The other numbers in the code ran properly and are identical to the module 4 challenge screenshot.

Pictured below is an image of the School Summary

Table

Description automatically generated

Pictured below is an image of the top five schoolsTable

Description automatically generated

Despite replacing the math and reading scores for Thomas High school ninth graders, there was no significant change to the data.

**Conclusion**

The main difference in the original dataset for PyCitySchools and PyCitySchools Challenge is that the Math and Reading scores for the ninth graders from Thomas High School were replaced by NaN. The scores by school type remained the same and the scores by school spending data were similar as well.