**Cohesive Written Analysis**

**Summary of Analysis:**

In this analysis, we examined various key metrics related to school performance using data from two CSV files: schools\_complete.csv and students\_complete.csv. The goal was to gain insights into the academic performance of students in different schools based on factors like school spending, school type, and year levels.

We started by merging the two datasets based on common columns, enabling us to analyse student and school data together. We calculated several key metrics, including the total number of unique schools, total students, total budget, average math score, average reading score, percentage passing math, percentage passing reading, and percentage overall passing.

Next, we broke down school performances based on average spending ranges per student. We used four reasonable bins to group school spending and calculated mean scores and passing rates within each spending range.

Two conclusions from the calculations:

1. **School Type Performance**: It is understandable from the Calculation of Top Performing Schools and Bottom Performing Schools that **Griffin High School** have highest % overall passing compared to **Ford High School** which have lowest % overall passing. Also, this means we can identify which perform better Government schools or Independent Schools.
2. **Year-wise Academic Performance**: The Maths Scores by Year and Reading Scores by Year analyses provide insights into how academic performance varies across different year levels (9, 10, 11, and 12) at each school. This information can help identify any patterns or trends in academic improvement or decline as student’s progress through different year levels.