PyCitySchool Analysis

**Summary of Analysis**

In this analysis, I studied 39,170 students across 15 schools. The analysis covers an overview of district schools, individual school summaries, top and bottom performing schools, math and reading scores by grade, and separate summaries based on spending per student, school size, and school type.

**School Performance**

* On average, math scores were 78.9%, with a pass rate of 74.9%.
  + The highest performing school was Pena High School (94.6%), while the lowest was Huang High School (65.7%).
* Average reading score was 81.9%, and the pass rate averaged at 85.8%.
  + Thomas High School had the highest reading score (97.3%), and Ford High School had the lowest (79.3%).
* Overall pass rate averaged at 65.1%, with the highest at Cabrera High School (91.3%) and lowest at Rodriguez High School (52.9%).

**Math vs. Reading Performance**

Math consistently had a lower pass rate than reading, especially in larger, underperforming schools with higher spending per student

**School Types and Performance**

Top 5 schools were charter, while bottom 5 were district. Charter schools showed better average math and reading scores, as well as higher pass rates for both math and reading. The overall pass rate was also significantly higher for charter schools (90.43% vs. 53.67%). This difference is largely driven by math scores. Further analysis is needed to determine if this is due to school quality or the smaller student population in charter schools compared to district schools.

**Impact of School Size**

Medium-sized schools (1000-2000 students) had the highest overall pass rate at 90.62%, followed by small and then large schools. Large schools consistently performed worse compared to medium and small schools across all measures.

**Effect of Spending**

Schools with lower spending per student (<$585) had a higher overall pass rate of 90.4%. The pass rate decreased as spending per student increased.

**Consistency in Scores by Grade**

Math and reading scores by grade level remained relatively consistent across different school groups.

**Conclusion**

From the data, it's suggested that students attending medium-sized charter schools with lower per student spending are likely to experience a higher overall pass rate.