Summarize the analysis.

In PyCitySchools, our task is to compare 15 schools. Of the 15, eight are district types and seven are charter types with a total of 39,170 students. We place “Total Schools”, “Total Students”, “Total Budget”, “Average Math Score”, “Average Reading Score”, “% Passing Math”, “% Passing Reading”, and “% Overall Passing” into a district summary table.

For the School Summary section, we need to separate each school into district or charter type. Then group each school with the total students, school budget, school capita, and comparing math and reading scores. We create a school summary with “School Name”, “School Type”, “Total Students”, “Total School Budget”, “Average Math Score”, “Average Reading Score”, “% Passing Math”, “% Passing Reading”, and “% Overall Passing” for each school.

The highest-performing and the lowest-performing schools are calculated with the overall passing rate computed in the last section. This is where we can see that charter schools have the highest performance compared to district schools.

Next, we compare math and reading scores in each grade level given. We see the reading scores are higher than math scores for each school. When comparing the grade levels within each school, variance is minimal.

Now, we compare scores by school spending. Then, we create bins for each student budget. We place “Spending Ranges (Per Student)”, “Average Math Score”, “Average Reading Score”, “% Passing Math”, “% Passing Reading”, and “% Overall Passing” into a spending summary table. We compare this table and make a statement proving the spending range is low, the scores are higher.

We compare the scores by school size by creating 3 bins; small, medium, and large. We place “School Size”, “Average Math Score”, “Average Reading Score”, “% Passing Math”, “% Passing Reading”, and “% Overall Passing” into a size summary table. The only major difference was found with large school size. The larger school size has a larger variance.

Lastly, we compared the scores by school type. We placed “School Type”, “Average Math Score”, “Average Reading Score”, “% Passing Math”, “% Passing Reading”, and “% Overall Passing” into a type summary table. Charter schools have a significantly higher score compared to district schools.

Draw two correct conclusions or comparisons from the calculations.

1. Charter schools have the highest-performing schools compared to district schools that are the lowest-performing schools.
2. Large size schools have lower scores compared to small and medium, which have similar scores.