Analysis Report

To receive all points, the written report presents a cohesive written analysis that:

* Summarizes the analysis (5 points)
* Draws two correct conclusions or comparisons from the calculations (10 points)
* As a whole, schools with higher budgets, did not yield better test results. By contrast, schools with higher spending 645-675 per student actually underperformed compared to schools with smaller budgets (585 per student).
* As a whole, smaller and medium sized schools dramatically out-performed large sized schools on passing math performances (89-91% passing vs 67%).
* As a whole, charter schools out-performed the public district schools across all metrics. However, more analysis will be required to glean if the effect is due to school practices or the fact that charter schools tend to serve smaller student populations per school.

Once combining the two data sets, we can see all high school students in the PyCity district and their math and reading numeric grades as well as the total budget for each high school. From there, I made an initial summary table separated by individual schools, to get a overview of the entire district. Then went further and did tables for both reading scores and math scores by grade for each school. The final three tables were average math and reading scores and passing percentages based off of the school’s budget per student, the school size and the school type. These three tables are what you can draw a better conclusion from. You can see that the budget per student table actually shows that the schools that were given a higher budget per student actually have lower math and reading score averages that the schools that were given a lower budget per student. That alone doesn’t mean much though because there is a wide range of school sizes within this district. Looking at the school size table you can clearly see that the large schools with over 2,000 students, had a much lower passing rate for math, reading and overall than schools with less than 2,000 students. Even further than that, in the averages by school type, it is clear that charter schools outperform district schools. Their overall passing rate is almost 40 percentage points higher than district schools. Overall, from this data set we can see that charter schools perform better than district schools, schools with less than 2,000 students perform better than schools with more than 2,000 students and budget per student is an unreliable metric to base school performance on. In order to get a more in depth reason behind these conclusions, we would need to base it off of size as well as type of school and also look into the methods of teaching for individual schools. I think it would also be beneficial to know whether the student has an outside-of-school tutor which of course can greatly skew the results given.