**PyCitySchool Insights and Considerations**

After analyzing the data in the PyCitySchools assignment, we can draw the following three conclusions:

1. Overall, student scores for reading are significantly higher (85.81% passing) than those for math (74.98% passing). The difference in percentages of students passing is more clear than the average reading and math scores, which indicates the fact that an average is not always the most suitable metric to check certain data trends. The total overall percentage of students passing, so for both math and reading, is even lower at 65.17%.

1. The top 5 performing schools happen to be the ones with the top budgets per student. The opposite trend can be witnessed in the bottom 5 performing schools, which happen to get the lowest budget per student. Furthermore the amount of students is a factor; top performing schools tend to have significantly lower amounts of students than bottom performing students. There is a clear correlation between budget per student and performance, as well as between the amount of students and performance. Based on this dataset however, we cannot be certain what the causality between the these factors is, and in which direction.
2. In general, looking at the total cohort, we see that school size (amount of students) is more correlated with performance than sheer budget per student. Charter schools tend to perform better than district school in both math and reading. Charter schools have a 93.62% percentage for math and 96.59% for reading, while district schools have an average math passing percentage of 66.55% and a 80.80% passing percentage for reading. The overall passing percentage is even more divided: 90.43% in charter schools compared to only 53.67% in district schools. One possible explanation is that charter schools have an overall larger budget and a smaller student cohort on average than district schools. Once again the causality of these factors is unknown from this dataset.