**PyCitySchools Data Analysis**

**Summary:**

Data was gathered from two csv files – one containing student data and the other containing the students’ respective school characteristics. Together, the files comprised a single dataset analyzing nearly 40K different students in 15 different schools belonging to either district or charter schools. Student reading scores, math scores, and passing scores were analyzed against school characteristics. These analyses include district and school analyses; best and worst performing schools by test scores; and scores by grade, spending, size, and type. Amongst all of the data school size, school spending, and school type were the most telling.

**Conclusions:**

* The most significant data comes from the top/bottom performing school tables and scores by school type tables. Not only do Charter schools hold the top 5 schools within the data set for overall student success, but students are more likely to be successful in both math and reading in a charter school. The passing rate gaps for math and reading between the two school types ranges from 16.5% to 27%.
* The level of school spending and success is negatively correlated. The greater a schools spending per student is (at least within this dataset) the less likely the students are to succeed. Also, smaller schools tend to have greater success rates than schools with more students (specifically schools with more than 2K students tend to perform several % points lower in both math and reading.

**Ending Thoughts:**

Students are more likely to achieve success in environments where there are fewer total students, and lower budgets. Charter schools often tend to offer greater success rates in all aspects analyzed within the report.