For the PyCity Schools project, two datasets were merged including both individual school and student data. A summary table of the dataset was created to highlight summary statistics at the district level. The table included the total number of schools, total number of students, and total budget for the district. The summary table also included the average math and reading scores for the district, and the percent passing math, reading, and math/reading combined. After creating the district summary, a summary table for the individual schools was also created that included school name, school type (district versus charter), total number of students and budget per school, and budget per student. The table also included the average reading and math scores and the percent passing math, reading, and math/reading combined for each school. This data frame was filtered to show only the top and bottom schools regarding the percentage of students that were passing both math and reading. Average math and reading scores were also calculated for each of the schools by grade. Lastly, average scores and percent passing were analyzed based on school spending per student, average scores and percent passing were analyzed based on school size, and average scores and percent passing were analyzed based on the type of school (district versus charter).

There are many conclusions that could be made from the analyses conducted. For example, the top 5 performing schools based on percent overall passing are all charter schools while the lowest 5 performing schools were district schools. Most if not all schools had lower average math scores than reading scores which undoubtedly effected the overall percent passing rate for the schools. Most of the average math and reading scores appeared to seem consistent across grades and only differed by less than a point or two. Additionally, the data suggests that schools with higher spending ranges per student have lower average math and reading scores, and a lower percent passing math, reading, and both. However, further analyses would need to be conducted to ensure that this relationship actually exists. Similarly, there appears to be a relationship with school size and scores with larger schools having worse scores. Again, further analyses would need to be conducted to substantiate this relationship.