**Module 4: Analysis**

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This analysis was conducted on two data sets. The first data set was school district information and the second was information about each student in the different schools. The main focus of the analysis was to judge the performance of math and reading levels of the students. We did this by creating a data frame of the datasets and performing some filtering and statistical analysis on the math and reading scores. We were also able to determine the different budgets and sizes of the schools with the school data set. By using group by functions of pandas, we were able to judge the performance of the students by school and district as well as by grade.

Some of the conclusions that can be made from this analysis are:

1. Although it would seem obvious that higher budget per student would result in better grades, this is not actually the case. We can see that smaller charter schools heavily outperform district schools with a lower budget per student. It seems that the size of the school impacts the students overall passing rate much more. This makes sense as with a smaller school it is easier for the school to pay more individual attention to student needs.
2. It seems to me that the students in this analysis don’t improve their math and reading levels throughout their high school career. By looking at the passing rates by grade, the scoring rates stay pretty consistent throughout the 4 years for most schools. This seems to indicate that whatever reading and math level they have starting high school in the 9th grade is where they will likely finish as well.