**PyCitySchools Analysis**

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From the Data given we can obviously see that Charter schools outperform District schools. There is a clear line when sorting by % passing overall, jumping from 54% passing at Baily High, to 89% passing at Holden High. There are several factors that could contribute to this in the data given, the first of which being the amount of students at each type of school. On average District schools have over double the amount of students as Charter schools. This could be very significant if we pair it with a data point that we do not have, the number of teachers per school, but with the data present we can pair it up to the budget per student. The budget per student is actually higher at District schools, by about $45, which when we look at the % passing overall tells me that maybe this money is spread thinner across different programs which may result in less effectiveness overall.

Looking at the data we can also see that the average math score is always lower than the average reading score, not by much when looking at the Charter schools, but always by a lot when looking at the district scores. This tells us that possibly the way that they teach math at the Charter schools is different than the District schools, or that there is a greater focus on math at the Charter schools. Either way it tells us that the District schools might want to rework the way they teach math.

When it comes to school size, the highest passing overall tends to be the medium (1000-2000 students) size, with the small (<1000 students) following close behind, and a big drop in large schools (2000-5000 students). The reason for this, I believe, is the teachers. The relationship between students and teachers is very important in the learning process, if students and teachers get along and communicate well, then students learn better. It is hard for this relationship to form if there are more students in each class than the teacher can handle. We see this in the medium and small sizes of schools, where teachers can have more knowledge of every student, and students know more of each teacher.