The code I built combines and summarizes data from two separate csv files. It breaks the data down by different categories and views the data from different angles. The code analyzes the entire school district as one unit first, then breaks it down by school, school type, school size, budget per student and then calculates and displays information regarding math and reading scores as well as passing percentages. From the information the code helps summarize, we can see that charter schools, small and medium schools and schools that spend less per student tend to have better math and reading scores as well as passing percentages. District schools, larger schools and schools that spend more per student tend to have lower passing percentages.

Against my expectations, it seems that the less a school spends per student, the better the passing percentages. The spending summary shows that schools that spent less then $585 per student have a 90% overall passing percentage while a school that spent $645-$680 has only a 53% overall passing percentage. While I would expect a school that spends more per student to have better passing percentages, the data shows the opposite. I did, however, notice that schools that spent less per student tended to be charter schools. We can expect that more of the money per student is probably being provided by the parents so the school has to spend less per student.

If we look at the size summary, we can see that small and medium schools have about the same passing percentages. This is more expected. There isn’t much variance between small and medium schools but a fairly large variance between small/medium and large schools. Small schools have a 89.5% overall passing percentage, medium school have a 90% overall passing percentage while large schools only have a 57.75% overall passing percentage.

Looking at the highest performing and lowest performing schools dataframes, we can easily see that the top 5 schools are all charter schools and the bottom 5 schools are all district. Without looking at any other data, we can go ahead and assume that charter schools are better. If you then compare that to the school type dataframe, that assumption is proven to be true. There is over a 30% difference in the overall passing rate between charter schools and district schools. Charter schools have a 89% Overall Passing percentage while district schools have a 53% Overall Passing percentage.

Overall, small and medium schools, charter schools and schools that spend less per student have better math and reading scores. They also have better math, reading and overall passing percentages. Ultimately, I think if you were to make a decision what kind of school you’d want to put your child into based off the data here. A medium sized charter school is the best bet for any child.