**PyCity Schools Analysis**

In the following report I explain, in every section, some of the most important information regarding the district-wide standardized test results of the schools of the district, from 9th to 10th grade.

**District Summary**

From this section, it's important to point out that:

* The total budget is $24,649,428 for the 15 schools in the district. The average grades and percentage of the approved students can be found in the outputs of the given code.

**School Summary**

From this section it's important to notice that the schools can be district schools or charter schools.

* Considering this, we can also notice that:
  + Charter schools have less students, and a lower total budget.
  + And also, the per students budget is smaller, it's not that different.
  + Finally, the most important thing to point out in this section, is that the % passing math at charter schools is greater than 90% in all cases.
  + On the other hand, the district schools seem to have difficulties at math, as the % passing math at this type of school is under 70% in all cases.
  + This also happens in reading, where the % passing in charter schools is above 95%, and at district schools is under 85%.
  + This is also reflected in the overall passing, where the district schools overall passing rate is under 55%, and the charter schools are around 90%.

**Highest and lower performing schools**

In this section what I pointed out in the School Summary section is more clear, as the top 5 schools are charter type, and the bottom 5 are district type.

**Math and Reading scores by grade**

Having a look at the data of these two sections, it would be important to point out that, in every school, the scores along the grades vary too little, so we can deduce that the academic level of math and reading is the same in all grades of each school.

**Scores by School Spending**

In this section we can notice something really interesting that is related to what I said at school summary section:

* The budget per student isn't a determining factor for the scores, and % overall passing, as most of the charter schools has less budget, and greater scores.
* We even can state, as a hypothesis, that with a greater per student budget comes smaller scores, and % overall passing at this kind of test. This may be because a larger budget allows for additional investments in extracurricular activities, potentially impacting the test scores and overall passing rates.

**Scores by School Size**

* In this section, we can see that large size schools are more related to a smaller % overall passing, than medium, and small schools.
* Despite this, this may not be a determining factor to explain the scores, and the % overall passing, but a factor related to the type of school.

**Scores by School Type**

Finally, here, we can find some information that supports the previous analysis, as:

* Charter type schools are related to a greater average in math, greater % of passing math and reading, and a greater % of overall passing.

All the charts that were used to do this analysis, can be found at each marker I referred to.