**PyCitySchool Analysis:**

The data used in two CSV files for the district's schools and students served as the basis for this analysis. Pandas and Jupyter Notebooks are used to analyze the data. The following are some conclusions and summary points that might be made based on the analysis:

* Generally speaking, one would assume that something would perform better if more resources were allocated to it. On the other hand, this dataset shows the opposite conclusion. Less than $585 per student was spent in the schools with the lowest spending ranges, and these schools had higher average math and reading scores as well as higher passing percentages for both reading and math for all children. Compared to other schools in the district, these schools not only had smaller budgets overall, but also smaller budgets per student.
* The passing rates (about 90% overall, 93% for arithmetic, 96% for reading), and average scores (around 83 for both reading and math) were nearly same for small-sized schools (less than 1000 students) and medium-sized schools (1000 to 2000 students). In particular, these schools scored better in terms of passing scores than the large-sized schools (2000–5000 students).
* Academic achievement was nearly identical across all categories for students in all grades.
* In terms of passing scores, pupils often perform better in reading (79%–97%) than in math (65%–94%). In comparison to the average passing rates for math and reading, the total passing rates (52%–91%) are lower. This suggests that not all pupils who receive a math score of 70 or higher also receive a reading score of the same magnitude, and vice versa

**District Summary:**

* The district has 15 schools
* There are 39,170 pupils enrolled in all of the schools.
* The district has a total budget of $24,649,428.
* The district's average math score is 79.985.
* the district's average reading score is 81.878.
* 74.981% of students passed math in the district with a score of 70 or higher.
* 85.805% of students passed reading in the district with a score of 70 or higher.
* Finlay, 65.172% of students passed both reading and math in the district with a score of 70 or higher in both subjects

**School Summary:**

* There are eight charter schools in the district, with a student population ranging from 427 to 2283
* There are more students in district schools than in private ones, with a range of 2739 to 4976 for each of the seven schools. Charter schools have a smaller overall budget, ranging from $0.25 to $1.32 million.
* District schools have a larger overall budget, which ranges from $1.76 to $3.12 million.
* Charter schools have a budget of between $578 and $638 per pupil.
* District schools receive between $628 and $655 per pupil in funding.
* Schools with a larger student population typically have larger overall budgets, which is the case for the majority of District schools. Nevertheless, the amount allotted for each student varies.
* The average math score of children attending Charter schools is higher (83) than that of pupils attending District schools (76–77). In addition, a higher percentage of pupils in Charter schools (92%–94%) than in District schools (65%–68%) pass math classes with a score of 70 or above.
* The average reading score of pupils attending Charter schools is higher (83–84) than that of students attending District schools (80–81). In addition, more kids in Charter schools (95%–97%) than in District schools (79%–82%) pass reading assessments with a score of 70 or above.
* Additionally, compared to District schools (52%–54%), the overall passing percentage (children passing both math and reading) is greater in Charter schools (89%–91%).

**Highest Performing Schools (by % Overall Passing):**

* Charter schools make up all five of the top performing schools in terms of overall passing rate, with over 90% of pupils earning a math and reading score of 70 or higher.
* The school that receives the highest overall score does not always have a larger budget per student. This could suggest that student performance is not directly impacted by the amount of money spent on each student.

**Bottom Performing Schools (by % Overall Passing):**

* District schools account for all five of the lowest performing schools in terms of overall passing rate, with fewer than 53 percent of pupils earning a combined math and reading score of 70 or above.
* For the school that received the lowest overall scores, the budget per student is comparatively higher. This could suggest that student performance is not directly impacted by the amount of money spent on each student.