PyCitySchool Analysis

In order to analyze PyCitySchool, schools complete and students complete csv files were used as the based data. Using Jupyter notebook and functions within: Pandas, DataFrame, etc., I performed analysis which can be found below.

Summarize the analysis

The district we are analyzing has a total of 15 schools, 39,170 total students, an average math score 79.0, an average reading score 81.9, a 75.0 percent passing math, a 85.8 percent passing reading, and a 65.2 percent overall passing math and reading.

When drilled down to the by spending ranges (Per Student) the less than $585 group had the highest Average Math Score, Average Reading Score, % Passing Math, % Passing Reading, and % Overall Passing than the other ranges. Within the group the type of schools are charter with overall total budgets that were less compared to the other schools within the district.

Scores by size of school small-sized (less than 1000 students) and medium-sized (1000 to 2000 students) had similar average math score, average reading score, % passing math, % passing reading, and % overall passing math and reading. These two groups performed much better then large-sized schools (2000 to 5000 students) in all 5 metrics, especially in terms of overall passing math and reading.

Charter schools significantly outperformed district school in percent passing math, percent passing reading, and percent overall passing math and reading. Which correlates with the top five highest performing schools by percent overall passing math and reading which are charter schools. This could be attributed with smaller class sizes which focus on students that is offered in a charter school, however, we don't have access to class sizes by school to draw this conclusion based on data provided.

Math and Reading scores by grade don't show enough of a change to draw any conclusions of one grade being better than the other.

The above analysis and conclusions are based on different prompts asked by this module challenge.