Pandas Data Report

After extracting our data, The data of schools and students in the overall dataset has provided multiple tables and data frames that have shown multiple different metrics comparing each school by their budgets, passing rates, school type, and school size. Our data now provides a clear overview on the entire district. In this dataset, there are 39,170 students from various different schools with their current year/grade in school in one sheet. The other sheet consists of the fifteen schools and gives a small data set of their size and type. Using these sheets, we manipulated the data after importing the sheets into pandas by using functions such as .countvalues, .mean, sort.values, pd.DataFrame, and .groupby to create data frames that helped us capture visualizations so we can identify findings and trends efficiently. Our goal was to compare each school based on what they had achieved then observe and analyze the data to see if there were any trends that could be identified. After observing the dataframes, we can conclude two different things. The first being that schools that spent less than $585 per student on their budget had the highest average math and reading grades in the district. Schools that spent more per student had slightly lower grades and this could be a result of many different factors such as school size, type, and education quality. The second conclusion we can make is that charter schools had a much higher overall number of overall student passing with 90.34% in comparison to district schools which only had 53.67% of their overall students pass. This may be a result of external factors that can’t be measured from this dataset alone such as differences in teaching philosophies, the student’s environment, or what kind of resources each school provided their students.