Pandas Homework – Academy of Py Write Up

There are a few interesting items of note when considering the data shown in the completed Academy of Py activity. First, looking at the DataFrame showing the average scores for schools sorted by per student budget shows us that schools spending the most money per student surprisingly had the lowest test scores across all categories. Going forward it would surely be worthwhile to dig a bit deeper into these results, as one would think that more money spent per student would correlate to higher test scores.

When looking at a similar DataFrame that sorts average scores and passing rates by the size of the school, the data reflects what the viewer would likely assume prior to processing the data: that smaller schools tend to have higher test scores. While the differences between the “small” and “medium” size categories were rather small (if any difference at all), schools in the “large” category had lower test scores across the board. One can infer that smaller schools generally have a higher faculty to student ratio which then allows for more time for teachers to spend with each individual student, likely improving their scores.

The last trend I found interesting was that the top five schools sorted by overall pass rate were all charter schools, while the bottom five schools by overall pass rate all fell in the district category. It would be interesting to look further into this discrepancy; are the top schools better simply because they are charter schools, or are there other contributing factors such as size, student demographics, quality of faculty, or perhaps something else? In any case, it would be wise for the school district board to figure out why the district schools are underperforming compared to the charter schools.