Pandas Challenge Report

Emily Medill

UCI: Data Analytics

Module 4

1. Summarize the analysis:

The PyCity School challenge initially provided brief data on students attending various high schools in a district. Through using Pandas, I was able to manipulate the data, compute calculations, and create several data frames to analyze what factors may impact the grades the students receive. The three components being evaluated for this are budget, school size, and school type.

1. Draw two conclusions or comparisons from the calculations.
   1. The data on the relationship between budget and average grades showed that more spending per student does not necessarily benefit the student academically. Interestingly, the lowest spending category of under $585 had the highest averages across all five categories: average math score, average reading score, percentage passing math, percentage passing reading, and percentage of overall passing. As the budget increased, the averages decreased. This illustrates that budget and average grades have an inverse relationship.
   2. The data comparing average grades between charter and district schools had a significant gap between the categories. It concludes that charter school students on average have higher scores and are more likely to pass than students attending district schools. In the percentage of overall passing category, charter schools received 90.4% while district schools received 53.7%.