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|  | | Module 4pandas-challenge | | | | |  | |
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## ‘PyCitySchools’ Analysis

##### Summary

This report is based on two csv data sets containing city school information.

The analysis starts with an overall school district summary and continues to dive deeper into various aspects of school performance metrics.

In this analysis we will see:

* An overview of 15 school district's key metrics.
* A per school summary of:
  + School Type
  + Total Students
  + Total School Budget
  + Per Student Budget
  + Average Math Score
  + Average Reading Score
  + % Passing Math
  + % Passing Reading
  + % Overall Passing
* The highest and lowest performing schools by % of overall passing.
* A breakdown of math and reading scores by grade.
* An analysis of school spending and its relationship to math and reading scores.
* An analysis of school size and the relationship to math and reading scores.
* An analysis of school types and the relationship to math and reading scores.

##### Conclusions

* **Charter schools have better scores and lower cost per student overall.**

In the ‘type\_summary’, we see that charter school types have higher overall passing scores.

This also shows true in the ‘top\_schools’ DataFrame as well as other data sets in the report.

* **Between grades 9 through 12, the average reading and math scores remain fairly consistent per school.**

In the DataFrame ‘math\_scores\_by\_grade’ and ‘reading\_scores\_by\_grade’, we can see that the average scores are consistent between the grade levels. From this we can also conclude that the performance is closely related to the school overall.