Project Overview

You are the data analyst for the city school district. In this capacity you will be helping the school board make strategic decisions.

As a first task you have been asked to analyze the district wide standardized test results. You will be given access to every student’s math and reading scores as well as various information on the school they attend. Your task is to aggregate the scores and show the trend in their performance.

Using Pandas and jupyter and other necessary library perform the necessary calculation and then create quality visualizations and snapshot of the district key metrics in dataframe.

DISTRICT SUMMARY

Analyze the following

1. Total number of unique schools
2. Total students
3. Total budget
4. Average math score
5. Average reading score
6. % passing math (percentage of students who passed math)
7. % passing reading (percentage of students who passed reading)

SCHOOL SUMMARY

Perform the necessary calculations and then create a dataframe that summarizes key metrics about the school

1. School name
2. School type
3. Total students
4. Total school budget
5. Per student budget
6. Average math score
7. Average reading score
8. % passing math (percentage of students who passed math)
9. % passing reading (percentage of students who passed reading)

HIGHEST PERFORMING SCHOOLS (BY OVERALL % PASSING)

Sort the school by % overall passing you calculated initially in descending order and dispay the top 5 rows. Save the results in a dataframe called “top\_schools”

LOWEST PERFORMING SCHOOLS BY % OVERALL PASSING

Sort the school by % overall passing you calculated initially in ascending order and dispay the top 5 rows. Save the results in a dataframe called “bottom\_schools”

MATH SCORE BY GRADE

Perform the necessary calculations to create a dataframe that lists the average math scores for students of each grade (9th, 10th, 11th, 12th)

READING SCORE BY GRADE

Perform the necessary calculations to create a dataframe that lists the average reading scores for students of each grade (9th, 10th, 11th, 12th)