**Project 2 Report**

I chose a scatter plot to represent the relationship between math and reading scores. A scatter plot is ideal for visualizing the correlation between two quantitative variables, making it easy to spot trends or clusters in performance metrics.

D3.js features I used and implemented

* Data Loading: Used d3.csv to load and parse CSV data.
* Scales: Defined xScale and yScale to map score values to SVG coordinates.
* Axes: Added x and y axes with labeled scales for clarity.
* Data Points: Plotted each student's performance as a circle on the scatter plot.
* Tooltip: Implemented a tooltip for showing exact scores when hovering over each point.
* Interactivity: Included hover effects on data points with tooltips to display scores dynamically.

Challenges I Encountered

* Scaling the Axes: Adjusting scales to include padding around the data was tricky. I resolved it by adding a margin to both x and y axis scales.
* Tooltip Positioning: Ensuring tooltips appear close to the data points without overlapping was challenging, but I adjusted their position relative to pageX and pageY.