***Module 4 Challenge Written Report***

* How is the district summary affected?
  + Average Math Score is decreased from 78.985371 to 78.930533.
  + Average Reading Score is decreased from 81.87784 to 81.855796
  + % Passing math is decreased from 74.980853% to 73.880521%
  + % Passing Reading is decreased from 85.805463% to 84.651519%
  + Therefore, overall passing % decreased from 65.172326% to 64.092418%
* How is the school summary affected?
  + Other school’s data remains the same
  + Only Thomas High Schools’ performance is changed as following:
    - Average math score decreased from 83.418349 to 83.350937
    - Average reading score increased from 83.848930 to 83.896082
    - % Passing Math dropped significantly from 93.272171% to 66.911315%
    - % Passing Reading dropped significantly from 97.308869% to 69.663609%
    - Therefore, Overall Passing % is dropped from 90.948012% to 65.076453
* How does replacing the ninth graders’ math and reading scores affect Thomas High School’s performance, relative to the other schools?
  + When other high schools’ performances remain the same, Thomas High School’s passing percentages were dropped significantly.
* How does replacing the ninth-grade scores affect the Math and Reading Scores by Grade, Scores by School Spending, Scores by School Size, and Scores by School Type?
  + 9th Grade = Thomas High School’s 9th grade’s average math score changed from 83.590022 to ‘NaN’ and average reading score from 83.728850 to NaN
  + School Spending
    - When other spending ranges remain the same, only $630-644 had changes as following :
      * Average math score decreased from 78.518855 to 78.502002
      * Average reading score increased from 81.624473 to 81.636261
      * Math passing percentage decreased from 73.484209% to 66.893995%
      * Reading passing percentage decreased from 84.391793% to 77.480478%
      * Overall passing percentage decreased from 62.857656% to 56.389766%
  + Scores by Size
    - Thomas High School falls into ‘Medium” size school
      * Average math score decreased rom 83.374684 to 83.361201
      * Average reading score increased from 83.864438 to 83.873869
      * passing math percentage decreased from 93.599695 to 88.327523
      * passing reading percentage decreased from 96.790680% to 91.261628%
      * Overall passing percentage decreased from 90.621535% to 85.447223%
  + Scores by School Type
    - When ‘District’ remains the same, ‘Charter’ had some changes
      * Average Math score decreased from 83.473852 to 83.465425
      * Average Reading score increased from 83.896421 to 83.902315
      * Math passing percentage decreased from 96.620830% to 90.325723%
      * Reading passing percentage decreased from 96.586489% to 93.130832%
      * Overall passing percentage decreased from 90.432244% to 87.198299%