**Evaluate Students Performance**

Understanding different factors like gender, parental education, lunch type, and test preparation affect student’s scores in math,reading and writing. Here find out if these factors make a difference in how well students perform in their exams.

Dataset Link : [Dataset\_Students\_performance](https://drive.google.com/file/d/11XPJSzb-X2ThIvliZQ_A0PxAxgmnjfO4/view?usp=sharing)

Problem Statement :

1.Check and Clean the Data:

* Load the Data, find missing values and repeated information and fix it.

2. Check the impact of Gender and Parental Education on Scores:

* First explore whether boys or girls perform better in Math,Reading and Writing
* Then see how parents' education levels affect student scores.
* Use list function to group students by gender and education
* Use dictionaries to display their average scores

3. Effect of lunch type and test preparation course on performance:

* Determine if students with a standard lunch or those who completed a test preparation course perform better or not.
* Organize the students into lists based on these factors and calculate their average scores by using dictionaries

4. Analyze Relationship between different factors:

* Identify if there is any pattern or correlation between factors like gender, race, and test\_scores. Use lists and dictionaries to organize the data.

Conclusion :

With this project, the analysis is mainly focused on how various factors, such as gender , parental education , lunch type, and test preparation, impact students' academic performance. By cleaning the data, identifying patterns, and using simple Python tools like lists and dictionaries,insights were gained into how these factors influence scores in Math, reading and writing. This understanding helps highlight which factors play a significant role in students' performance.