### ****Education****

Student performance and exam results

**Introduction**

In today’s data-driven world, academic institutions must adopt effective tools to monitor student performance and overall school effectiveness. This project focuses on analyzing student performance data across various subjects, with attention to gender differences and overall trends.

Using Microsoft Excel, the analysis explores academic outcomes, highlights patterns in subject-wise performance, and provides insights into potential factors affecting students’ results. The goal is to create an easy-to-understand dashboard that helps schools, teachers, and decision-makers assess progress and areas needing intervention.

The dataset used in this project includes student scores in Math, Reading, and Writing along with gender and other background information.

**Problem Statement**

Many schools and education administrators struggle to monitor and evaluate student performance trends over time. Without proper tools and insights, it's difficult to identify gaps in performance across gender, subjects, or student groups. This project aims to develop an interactive Excel dashboard that visualizes school performance, enabling stakeholders to make informed decisions for academic improvement.

**❓ Key Questions for Analysis**

**A. Performance Overview**

1. What is the average score in each subject (Math, Reading, Writing)?
2. What is the overall performance trend over the years (if year data is included)?
3. What percentage of students passed all subjects?

**B. Gender-Based Analysis**

1. Do male and female students perform differently in any subjects?
2. Which subject shows the largest gender performance gap

**C. Subject-Wise Analysis**

1. Which subject has the highest and lowest average performance?
2. Are there students who perform consistently high or low across all subjects?

**D. Additional Insight (optional if data is available)**

1. Does parental education level affect student performance?
2. Does test preparation improve results?