Student Performance Data Analysis Project (Python + SQL)

Project Overview:

Objective of this project is to work with a real-world student performance dataset, performing data extraction, cleaning, analysis, and visualization to derive meaningful insights. The data has been analyzed in different ways using Pandas, SQL and visualization libraries (Matplotlib/Seaborn).

- **Data Extraction:** Retrieved the dataset from Kaggle using the Kaggle API in Python.
- **Data Cleaning:** Utilized the Pandas library to clean and standardize column names for consistency.
- **Data Loading:** Structured and imported the data into SQL Server using Python libraries such as SQLAlchemy and Pandas.
- **Data Analysis and Visualization:** Conducted data analysis in Jupyter Notebook using Pandas and SQL (via the SQL Magic extension). Visualized trends and patterns through various charts with Matplotlib and Seaborn to highlight key insights and relationships.