Task 10: Python EDA + Outlier Detection
Dataset: Students Performance

Exploratory Data Analysis (EDA)
The dataset contains 1000 student records with 8 features, including demographic attributes and exam scores in Math, Reading, and Writing.

Dataset Overview
Rows: 1000
Columns: 8

Data Types
Numerical Columns: Math Score, Reading Score, Writing Score
Categorical Columns: Gender, Race/Ethnicity, Parental Level of Education, Lunch, Test Preparation Course

Missing Values
No missing values found in the dataset (0%).

Descriptive Statistics
Math Score → Mean: 66.1 | Median: 66 | Min: 0 | Max: 100
Reading Score → Mean: 69.2 | Median: 70 | Min: 17 | Max: 100
Writing Score → Mean: 68.1 | Median: 69 | Min: 10 | Max: 100

Distribution & Correlation Insights
Most students scored between 60 and 80. Reading and Writing scores show strong positive correlation, while Math shows moderate correlation with both.

Outlier Detection (IQR Method)
Math Score: Q1 = 57, Q3 = 77, IQR = 20, Lower Bound = 27
Outliers Detected: 18 students

Outlier Handling
Outliers were retained and flagged instead of removed, as low scores represent genuine student performance and are important for educational analysis.

Final Outcome
Successfully performed EDA and outlier detection, gaining meaningful insights into student academic performance.