# **■** Student Performance Report

Generated using Python, pandas, matplotlib & ReportLab

Prepared by: CHRYSL SHECKINA THOMAS
Internship: CodTech Technologies - Python Internship

Duration: 5th June – 5th July 2025

Date: 21-06-2025

#### 1. Key Insights

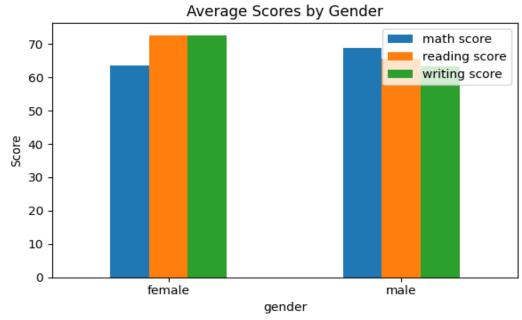
- ✓■ Female students scored higher in reading and writing.
- ✓■ Completing test preparation improves all subject scores.
- ✓■ Math scores vary more widely than reading/writing.
- ✓■ Higher parental education levels tend to correlate with better scores.
- ✓■ Majority of students did not complete test preparation.

Generated on: 21 June 2025 Page 1 of 7

# 2. Average Scores by Gender

Female  $\rightarrow$  Math: 63.6, Reading: 72.6, Writing: 72.5

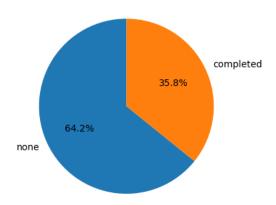
 $\text{Male} \to$ 



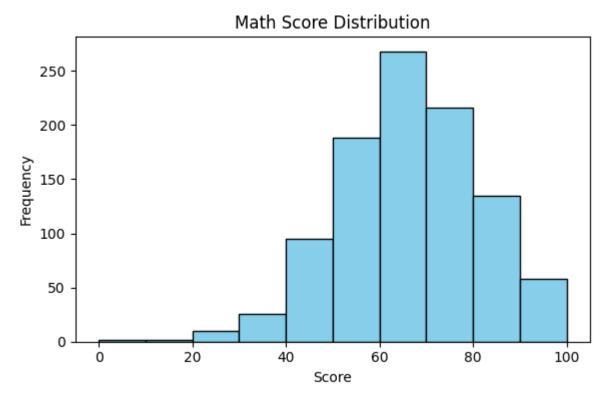
Generated on: 21 June 2025

# 3. Test Preparation Course Completion

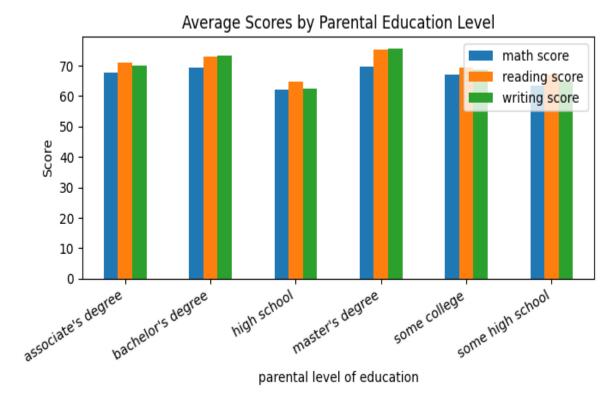
Test Preparation Course Completion



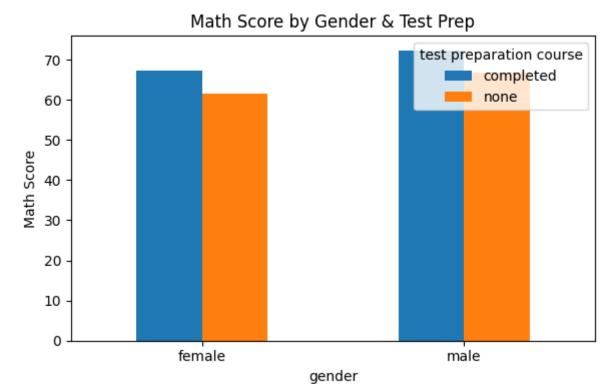
### 4. Math Score Distribution



#### 5. Scores by Parental Education Level



#### 6. Gender-wise Test Prep Impact on Math Score



# 7. Summary Statistics

MATH SCORE

Mean: 66.09 Std: 15.16 Min: 0.00

Max: 100.00 READING SCORE

Mean: 69.17 Std: 14.60 Min: 17.00 Max: 100.00 WRITING SCORE

Mean: 68.05 Std: 15.20 Min: 10.00

Max: 100.00

Generated on: 21 June 2025