DATA ANALYSIS PROJECT



What Factors Influence Student Academic Performance?

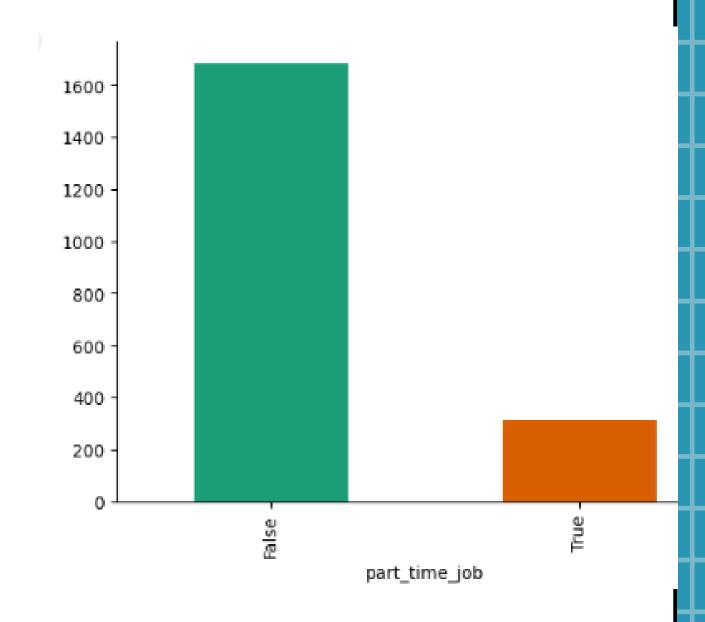
By Khadijat Agboola

INTRODUCTION

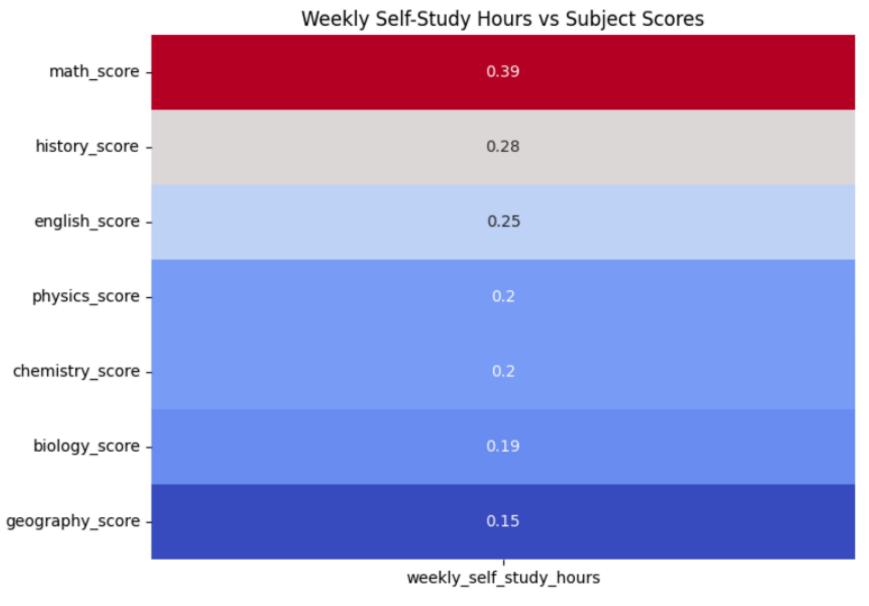
This analysis is done to analyze various factors that may influence student's academic performance

Dataset Overview

The dataset is gotten from kaggle. It contains 2,000 students records



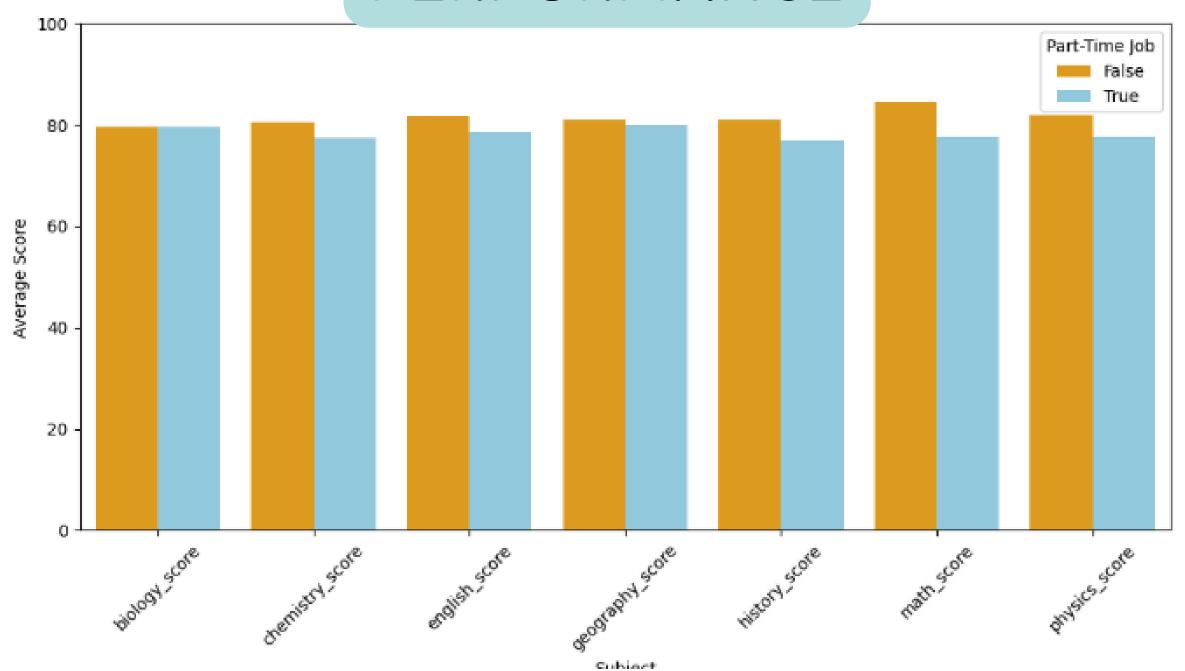
IMPACT OF WEEKLY STUDY HOUR ACROSS SUBJECTS





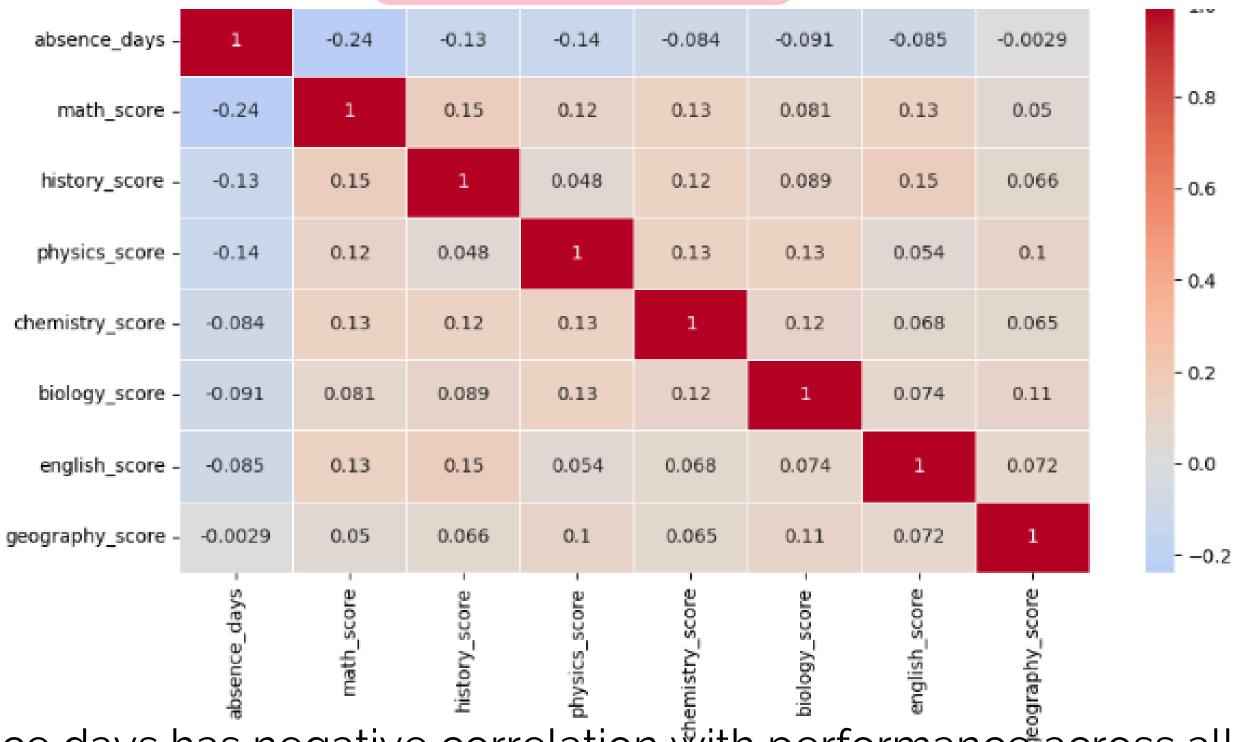


IMPACT OF PART-TIME JOBS ON ACADEMIC PERFORMANCE



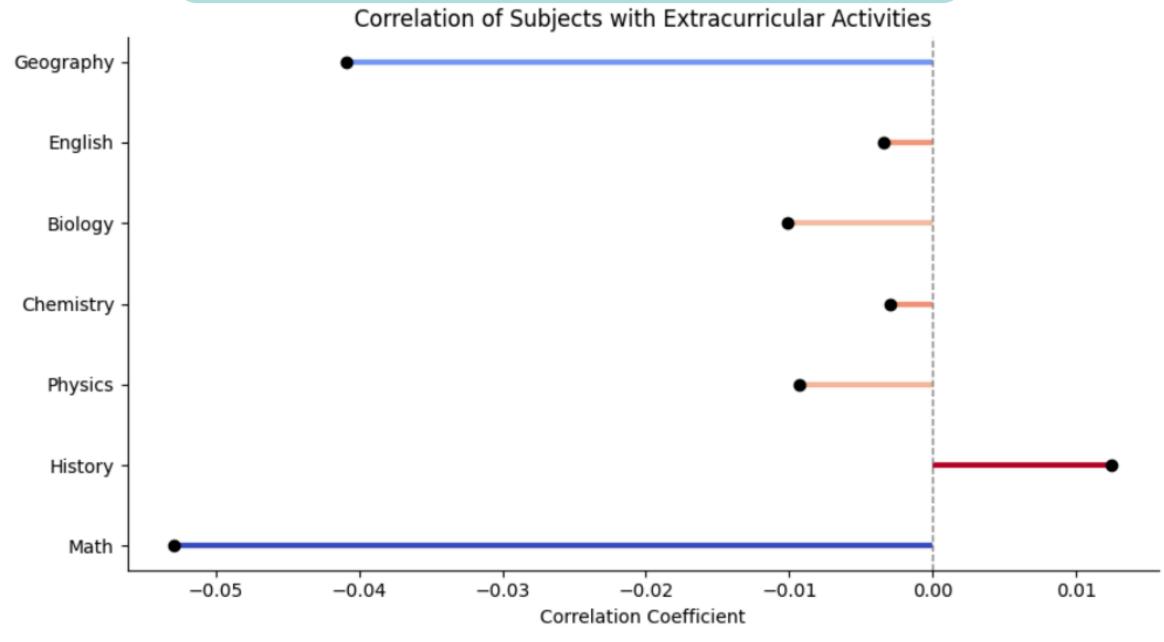
 There is a slight difference between students with part time jobs and those without

RELATIONSHIP BETWEEN ABSENCE DAYS AND ACADEMIC PERFORMANCE



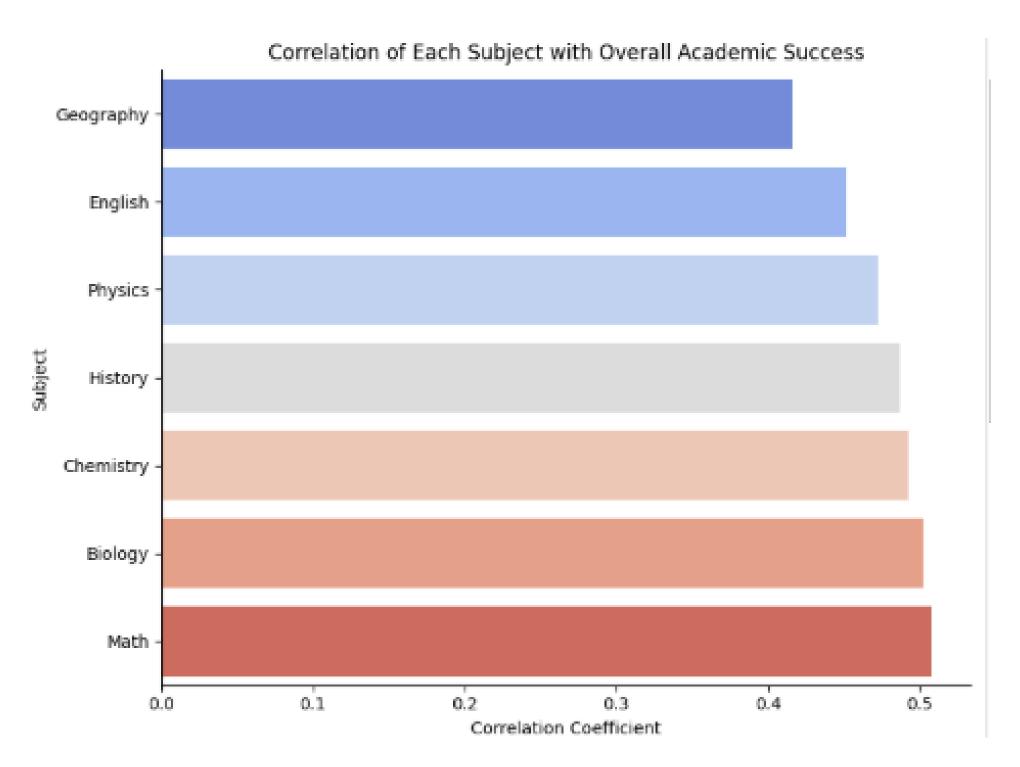
• Absence days has negative correlation with performance across all subjects

IMPACT OF EXTRACURRICULAR ACTIVITIES ON STUDENT PERFORMANCE



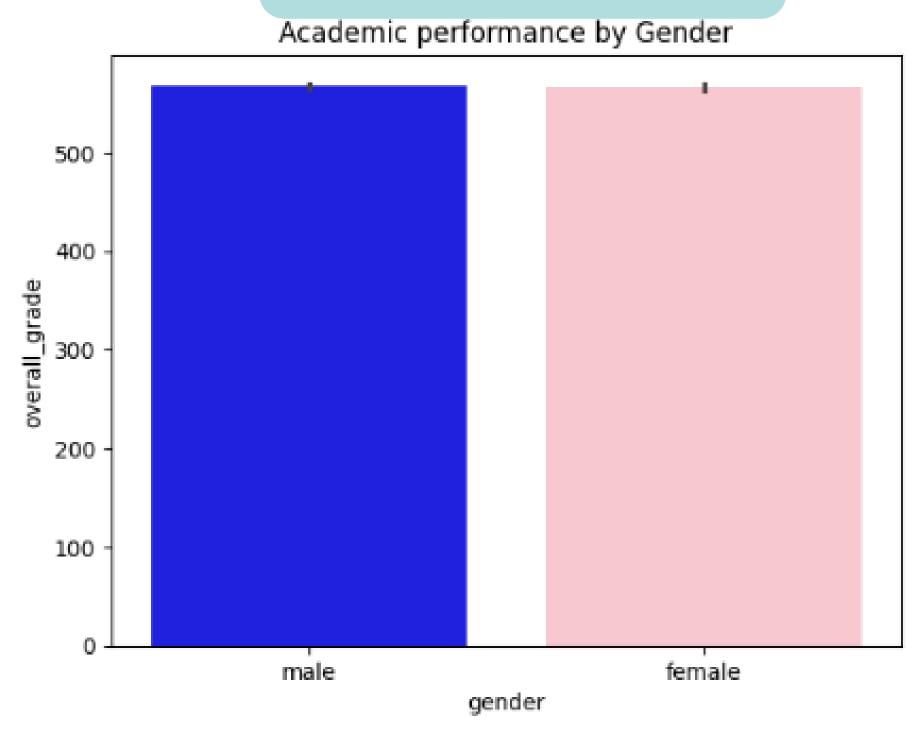
• Extra-curricular activities correlates negatively with all the subjects' grades save history

SUBJECT CORRELATION WITH OVERALL ACADEMIC SUCCESS



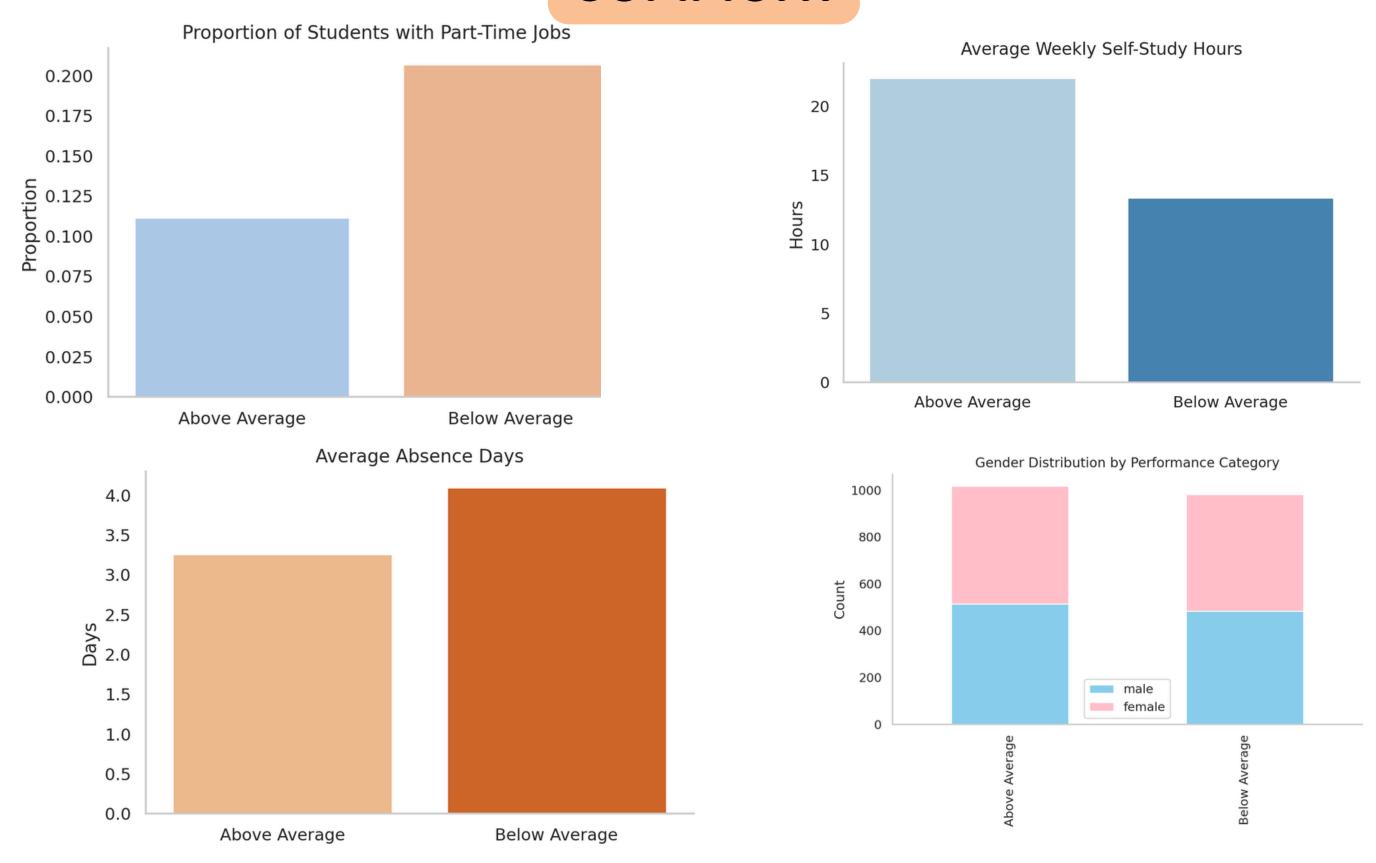
• Mathematics has the strongest correlation of 0.51 with overall score

GENDER INFLUENCE ON ACADEMIC PERFORMANCE



• Gender doesn't have any effect on academic performance

WHAT DO TOP-PERFORMING STUDENTS HAVE IN COMMON?



• Top-performing students tend to study more weekly, have fewer absences, and are less likely to hold part-time jobs

RECOMMENDATION

- 1. Students should dedicate more hours weekly to self-study, as it strongly correlates with higher academic performance.
- 2. Fewer absence days are linked to better grades across all subjects.
- 3. Students without part-time jobs tend to perform better academically.
- 4. While they support holistic development, involvement should be balanced to avoid negatively affecting academic performance.
- 5. Schools should support students struggling with time management or excessive commitments.