Student Performance Analysis Report

This project analyzes student academic performance using Python, Pandas, and Matplotlib. The study focuses on marks, attendance, and study hours to derive meaningful insights.

Objectives

- Analyze subject-wise and gender-wise performance

- Study the impact of attendance and study hours on marks

- Identify top-performing students

Dataset Preview

Student ID	Name	Gender	Subject	Marks	Attendance	Study Hours
1	Aarav	Male	Male	78	85	2.5
2	Diya	Female	Math	88	92	3.5
3	Rohan	Male	Science	65	70	1.5
4	Ananya	Female	Science	91	95	4.0
5	Kunal	Male	English	72	80	2.0

Key Findings

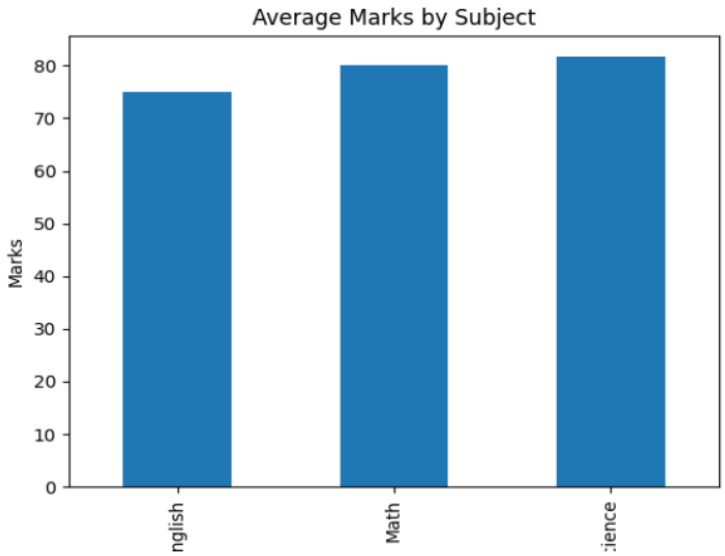
• Students with higher attendance generally scored better.

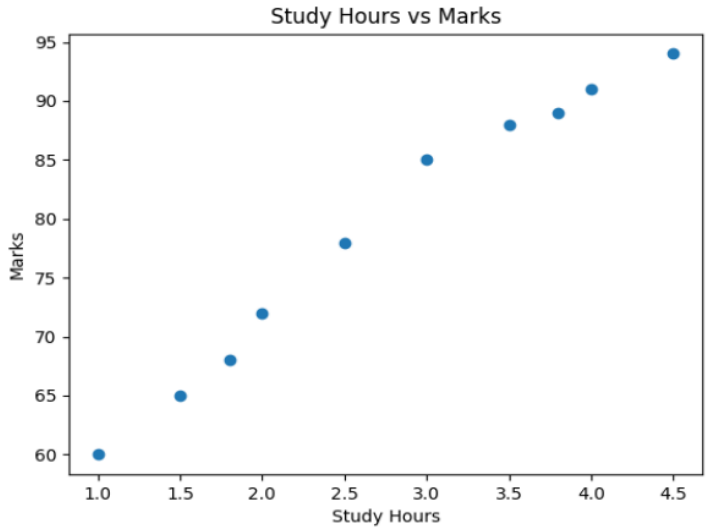
• Increased study hours show a positive correlation with marks.

• Female students performed slightly better on average.

• Science students achieved the highest average marks.

Visual Analysis





Conclusion

The analysis shows that higher study hours and attendance are associated with better academic performance. Visualization techniques make these insights easy to interpret and present.