📌 **Project Title:**

"Analyzing the Impact of Social Media on Student Life Using SQL"

🧩 **Problem Statement:**

With the increasing use of social media among students, it becomes essential to understand how different platforms influence their academic performance, sleep patterns, mental health, and social behavior. Educational institutions and mental health professionals need actionable insights to identify students who may be at risk due to excessive or harmful usage.

This project aims to **analyze student behavior and lifestyle attributes related to social media consumption** using structured query language (SQL). The objective is to uncover patterns and correlations between social media usage and various aspects of student well-being including:

- **Academic performance impact**

- **Mental health scores**

- **Sleep duration**

- **Relationship conflicts due to social media**

- **Addiction levels**

🎯 **Goals & Objectives:**

1. **Analyze social media usage patterns** across different demographics (age, gender, academic level, country).

2. **Measure the relationship** between usage time and addiction or mental health scores.

3. **Identify high-risk students** based on thresholds for addiction, sleep deprivation, and academic impact.

4. **Compare usage and health indicators** by platform (e.g., Instagram, YouTube, TikTok).

5. **Provide aggregated insights** to help decision-makers design awareness or intervention programs.

📁 **Dataset Description:**

The dataset contains the following attributes for each student:

Column Name	Description
Student_ID	Unique student identifier
Age	Age of the student
Gender	Gender

Column Name	Description
Academic_Level	Education level (High School, Undergraduate, Graduate)
Country	Country of residence
Avg_Daily_Usage_Hours	Average hours spent on social media daily
Most_Used_Platform	Most frequently used social platform
Affects_Academic_Performance	Indicates if social media affects academics (Yes/No)
Sleep_Hours_Per_Night	Average sleep per night
Mental_Health_Score	Mental wellness score (1–10 scale)
Relationship_Status	Relationship status
Conflicts_Over_Social_Media	Count of conflicts due to social media
Addicted_Score	Level of addiction (1–10 scale)

🛠️ **Tools & Technologies:**

- **SQL** (MySQL, PostgreSQL, or SQLite)

📈 **Expected Outcomes:**

- Dashboards or reports showing:
    - High-risk students
    - Usage patterns by demographic
    - Correlation matrices (Sleep vs Addiction, Mental health vs Conflicts)
- Recommendations based on aggregated data insights
- SQL scripts to automate such analysis

📘 **Beginner (Level 1) – Basic SELECT, WHERE, ORDER BY**

1. **List all student details.**
   SELECT * FROM students;

2. **Show the names and average daily usage of students from India.**

3. **Find the number of male and female students.**

4. **List all distinct academic levels.**

5. **Get all students who sleep more than 7 hours a night.**

6. **Sort students by their addicted score in descending order.**

7. **Find students who say social media *does not* affect academic performance.**

🟩 **Intermediate (Level 2) – GROUP BY, Aggregation**

8. **Find the average Addicted_Score for each academic level.**

9. **Show the total number of students by country.**

10. **Get the average mental health score grouped by gender.**

11. **Which platform is most used by students on average?**
    (Use COUNT() and GROUP BY)

12. **Find the platform with the highest average Addicted_Score.**

13. **What is the average daily usage for students who are 'Single'?**

14. **List the top 3 countries by average daily usage.**

15. **Find the number of students who sleep < 6 hours and have an addicted score > 7.**

🟧 **Advanced (Level 3) – Subqueries, HAVING, CASE**

16. **Identify students who have above-average addicted scores.**

17. **Find academic levels where average mental health score is below 6.**

18. **Which relationship status group has the highest conflict over social media on average?**

19. **Write a query to label students as 'Low', 'Medium', or 'High' risk based on Addicted_Score:**

- < 4 = Low, 4-7 = Medium, > 7 = High

20. **Create a summary: for each platform, show number of users and average usage time.**

21. **Find the top 5 students with the highest Addicted_Score who are also from Graduate level.**

22. **What is the average sleep duration for each mental health score group (bucketed by 2-point intervals)?**

🟥 **Expert (Level 4) – Complex Logic, CTE, Window Functions**

23. **Using a CTE, find students who have more than the average number of conflicts over social media.**

24. **Find the student(s) with the maximum Addicted_Score in each academic level.**
    (Use ROW_NUMBER() or RANK())

25. **For each country, rank students based on Avg_Daily_Usage_Hours. Show top 2 per country.**