



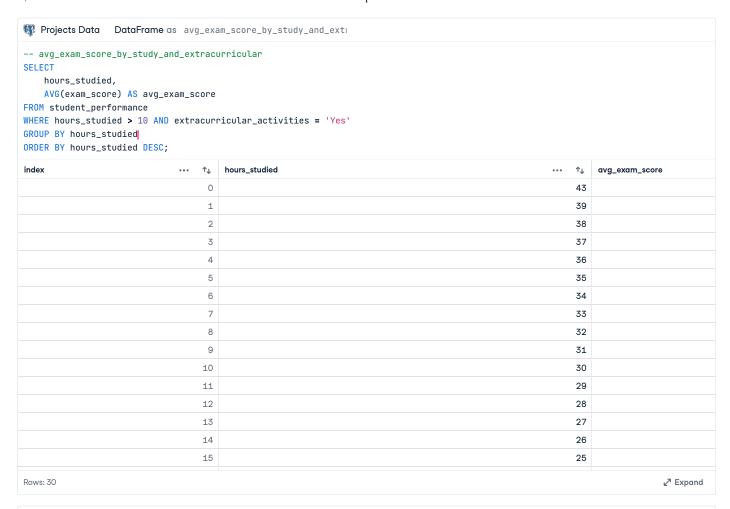
In today's fast-paced and competitive educational environment, understanding the factors that influence student success is more important than ever. Just like the transport system in a bustling city like London must adapt to serve its residents, schools and educators must adapt to meet the needs of students. In this project, we will take a deep dive into a dataset containing rich details about various aspects of student life, such as hours studied, sleep patterns, attendance, and more, to uncover what truly impacts exam performance.

The dataset we'll be working with includes a wide range of factors influencing student performance. By analyzing this data, we'll be able to identify key drivers of success and provide insights that could help students, teachers, and policymakers make informed decisions. The table we'll use for this project is called student\_performance and includes the following data:

Column	Definition	Data type
attendance	Percentage of classes attended	float
extracurricular_activities	Participation in extracurricular activities	varchar (Yes, No)
sleep_hours	Average number of hours of sleep per night	float
tutoring_sessions	Number of tutoring sessions attended per month	integer
teacher_quality	Quality of the teachers	varchar (Low, Medium, High)
exam_score	Final exam score	float

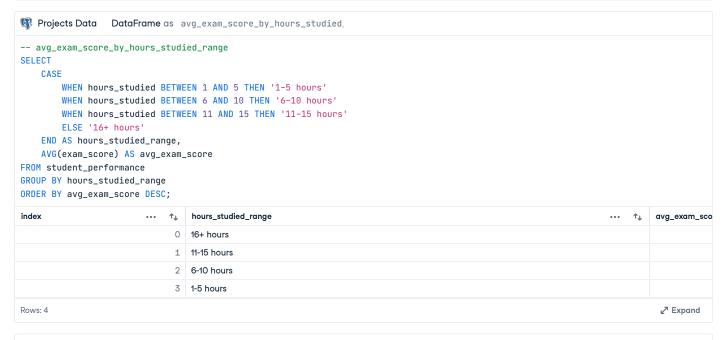
You will execute SQL queries to answer three questions, as listed in the instructions.

1) Do more study hours and extracurricular activities lead to better scores?



From our output, we can see that students who participate in extracurricular activities and study more hours tend to perform better on exams. As study hours increased, the average exam score increased.

2) Is there a sweet spot for study hours? Explore how different ranges of study hours impact exam performance by calculating the average exam score for each study range.



From our output, we can see that the more hours a student studies, they perform better on the exams.

3) How can we display each student's relative academic standing in the class using exam scores while preserving score confidentiality?

