

Submitted By:
Malaika Zulqarnain

What I learned:

During this project I learned how to create a complete database from scratch.I understood how primary keys and foreign keys help in connecting different tables with each other.While working on the students,courses,enrollments, and result tables,I got a clear idea of relational databases and how relationship work.

I also learned how to insert data using **INSERT INTO** statement and how SQL server automatically handles **IDENTITY** columns for AUTO INCREMENT .It also helped me understand **JOIN,AVG ,COUNT** and how to filter data using these conditions.

Challenges I faced:

One challenge I faced was database selection. In the beginning, my commands gave errors because I was not using the correct database. After understanding how the **USE** statement works, the issue was solved.

Another challenge was understanding auto-increment. I tried writing AUTO INCREMENT which works in **MySQL**, but SQL Server uses **IDENTITY(1,1)**. After learning the difference, I was able to correct it.

I also faced difficulty while writing **JOIN** queries because I had to make sure the correct fields were connected. Once I practiced a few examples, it became easier.

Final Summary:

This project helped me understand the complete workflow of database development. From creating tables to inserting data and finally writing basic to advanced queries, I practiced every important step. I learned how to manage relationships between tables and how to retrieve meaningful information using SQL queries.