Student Result Processing System

This project is developed using MySQL to manage and process student academic results. The system stores student details, course information, semester data, and marks. It calculates GPA, department-wise averages, and generates rank lists using SQL window functions. Objectives: • Design normalized database schema. • Implement foreign key relationships. • Perform aggregate calculations. • Generate reports using SQL queries. • Create views for result summaries.

Technical Implementation

Database Tables: 1. Students 2. Courses 3. Semesters 4. Grades Key Features: • GPA calculation using AVG() • Department average using GROUP BY • Rank generation using RANK() window function • Result summary view creation Tools Used: • MySQL • SQL Queries (DDL, DML, Aggregate Functions, Window Functions) Conclusion: The project demonstrates strong understanding of relational database concepts, query optimization, joins, grouping, and analytical functions.