

Student Result Processing System – Project Report

1. Objective

The objective of this project is to build a Student Result Processing System using MySQL to manage students' grades, calculate GPA/CGPA, generate rank lists, and export semester-wise summaries.

2. Tools Used

- MySQL
- SQL Queries and Triggers
- ER Diagram

3. Database Schema

The database consists of four main tables:

- Students
- Courses
- Semesters
- Grade

5. GPA & Grade Calculation

Grades and GPA are automatically calculated using a BEFORE INSERT TRIGGER on the Grades table.

6. Sample Queries

- GPA Calculation per Semester
- Pass/Fail Status based on grades
- Rank List using Window Functions
- Export Results using SELECT INTO OUTFILE

7. Output Screenshots

Include screenshots of table outputs and SQL queries execution here (can be added manually after export).

8. Conclusion

This project efficiently manages student results and allows future expansion like cumulative CGPA, web interfaces, and dashboards.