# Day 21 – SQL Practice: School Enrollment & Performance System

## 🏫 Dataset Overview

This dataset simulates a school's enrollment and student performance management system. It contains records of students, courses, enrollments, and performance metrics. The questions involve real-world problems faced by academic institutions—such as tracking top students, enrollment trends, performance by subject, and identifying students who need attention. Concepts include grouping, window functions, conditional logic, and more.

## 📁 Tables and Sample Data

1. Students

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| StudentID | Name | Gender | Age | City | JoinDate |
| 1 | Aryan | Male | 16 | Delhi | 2022-06-01 |
| 2 | Riya | Female | 17 | Mumbai | 2021-07-15 |
| 3 | Kabir | Male | 16 | Chennai | 2022-06-10 |
| 4 | Neha | Female | 15 | Kolkata | 2022-01-20 |
| 5 | Ishaan | Male | 17 | Delhi | 2021-05-25 |

2. Courses

|  |  |  |
| --- | --- | --- |
| CourseID | CourseName | Department |
| 101 | Mathematics | Science |
| 102 | English | Arts |
| 103 | Physics | Science |
| 104 | History | Arts |
| 105 | Computer Science | Technology |

3. Enrollments

|  |  |  |  |
| --- | --- | --- | --- |
| EnrollmentID | StudentID | CourseID | EnrollmentDate |
| 1 | 1 | 101 | 2022-06-05 |
| 2 | 1 | 103 | 2022-06-06 |
| 3 | 2 | 102 | 2021-07-20 |
| 4 | 3 | 101 | 2022-06-11 |
| 5 | 3 | 105 | 2022-06-12 |
| 6 | 4 | 104 | 2022-01-25 |
| 7 | 5 | 105 | 2021-05-30 |

4. Performance

|  |  |  |  |
| --- | --- | --- | --- |
| PerformanceID | EnrollmentID | Marks | ExamDate |
| 1 | 1 | 85 | 2022-09-10 |
| 2 | 2 | 90 | 2022-09-12 |
| 3 | 3 | 75 | 2021-12-10 |
| 4 | 4 | 88 | 2022-10-15 |
| 5 | 5 | 92 | 2022-10-20 |
| 6 | 6 | 68 | 2022-02-10 |
| 7 | 7 | 79 | 2021-08-30 |

## 🧠 Practice Questions

1) List all students along with the courses they are enrolled in and the department.

2) Display average marks scored by each student across all subjects.

3) Find top 2 scoring students in each department based on average marks.

4) Identify students who have not scored above 75 in any subject.

5) Show department-wise average performance of students.

6) List students enrolled in more than one course.

7) Find students who joined in 2022 and scored above 85 in any subject.

8) Display the most recent exam score of each student.

9) Find the course with the highest average marks.

10) Count how many students scored above the average of their course.

🎯 Bonus:

Rank students within each department based on their average marks, and show only the top student per department.