# Day 22 – SQL Practice: Online Learning Platform Analytics

## 🎓 Dataset Overview

This dataset simulates an online learning platform, including users, courses, enrollments, and course reviews. It focuses on user engagement, course popularity, learner feedback, and platform activity trends. Real-world scenarios like top-rated courses, inactive learners, and instructor performance are explored here.

## 📁 Tables and Sample Data

1. Users

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| UserID | Name | Email | JoinDate | Country |
| 1 | Aarav | aarav@example.com | 2022-01-10 | India |
| 2 | Maya | maya@example.com | 2021-09-15 | USA |
| 3 | Zoya | zoya@example.com | 2021-12-01 | India |
| 4 | Dev | dev@example.com | 2022-06-20 | UK |
| 5 | Emma | emma@example.com | 2023-02-14 | Canada |

2. Courses

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| CourseID | Title | Instructor | Category | CreatedDate |
| 101 | SQL for Beginners | John Smith | Data | 2021-05-01 |
| 102 | Python Basics | Alice Green | Programming | 2021-06-15 |
| 103 | Advanced Excel | John Smith | Business | 2022-01-20 |
| 104 | Data Visualization | Chris Lee | Data | 2022-08-10 |
| 105 | Machine Learning | Alice Green | AI | 2023-01-05 |

3. Enrollments

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| EnrollmentID | UserID | CourseID | EnrollDate | CompletionStatus |
| 1 | 1 | 101 | 2022-01-15 | Completed |
| 2 | 1 | 103 | 2022-03-10 | In Progress |
| 3 | 2 | 102 | 2021-09-20 | Completed |
| 4 | 3 | 104 | 2022-08-15 | Completed |
| 5 | 4 | 105 | 2023-03-01 | In Progress |
| 6 | 5 | 105 | 2023-03-05 | Completed |

4. Reviews

|  |  |  |  |
| --- | --- | --- | --- |
| ReviewID | EnrollmentID | Rating | ReviewDate |
| 1 | 1 | 4 | 2022-02-01 |
| 2 | 3 | 5 | 2021-10-01 |
| 3 | 4 | 5 | 2022-08-20 |
| 4 | 6 | 4 | 2023-03-20 |

## 🧠 Practice Questions

1) List all users along with the courses they are enrolled in, course category, and instructor.

2) Find the average rating of each course with at least one review.

3) Display the number of enrollments and completions per course.

4) Show the top 2 rated courses per category based on average rating.

5) Identify users who joined in 2022 and haven’t completed any course.

6) Show instructor-wise average course rating (only include courses with reviews).

7) List the most recent course enrolled by each user.

8) Find courses with more than 1 review and average rating greater than 4.

9) Count number of courses completed by users from each country.

10) Identify courses with no enrollments.

Bonus:

Rank courses by popularity (number of enrollments) and show only top course per category.