ASSIGNMENT TASK FOR THE WEEK

You work with a company managing multiple projects, tasks assigned to team members, and team details. Use the following tables to answer the questions.

Create the tables **Projects**, **Tasks**, and **Teams** to answer the following queries:

(Hint : create a different table for project, tasks, team each should consists of minimum 5column and 5rows except the Teams table)

Tasks :

- Using a CTE, find projects along with the number of tasks assigned and number of completed tasks. Show project_name, total_tasks, completed_tasks.

- Write a query to find the top 2 team members with the highest number of tasks assigned across all projects. Use window functions (ROW_NUMBER() or RANK()).
- Using a correlated subquery, find tasks whose due_date is earlier than the average due_date of all tasks in the same project.
- Find the project(s) with the maximum budget using a subquery.
- Write a query that returns the percentage of completed tasks per project. Use aggregate filtering or FILTER clause if supported.
- Use a window function to show each task with its assigned_to, task_name, and the count of tasks assigned to that person, ordered by assigned_to.
- Find all tasks assigned to team leads where the task is not completed and due date is within the next 15 days from today.
- Write a query to list projects that have no tasks assigned yet (projects without any task records).
- You have an to create additional table **Model_Training** (training_id, project_id, model_name, accuracy, training_date). Write a query to list each project with its best (highest accuracy) AI model name and accuracy.
- You have to create additional table **Data_Sets** (dataset_id, project_id, dataset_name, size_gb, last_updated). Write a query to find all projects with datasets larger than 10GB that were updated within the last 30 days.

After this a proper code explanation and description should be maintained.

Submission Formats.

SQL Script File (.sql)

- Contains all CREATE TABLE, INSERT, and query statements.

GitHub Repository

- Push it `.sql` files, README.md with explanations, and sample outputs.

Share the github link on whatsapp only in group not as personal message