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**Lab Task:** 04

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**Course Code:** CL2005

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**Course Title:** Database Systems - Lab

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**Semester:** Spring 2026

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## Guidelines

- Please review the lab manual before starting the task to ensure you fully understand the requirements.
- You may use **only the concepts covered in the lab manual** to complete this task.
- Your submission must be a **single PDF file** that includes:
  - The source code (in plain text)
  - Screenshots of the corresponding outputs
- Name your file using the following format: **rollno\_name\_labtasknumber.pdf**  
**Example:** *24p-1234\_ozair\_labtask04.pdf*
- Unethical use of AI tools will result in a **deduction of 5 marks**.
- Late submissions will incur a penalty of **-1 mark per day**.

## Tasks

You are provided with a SQL script file named ***Lab-04-games\_dataset.sql***, which contains SQL statements to create and populate the required tables using a simplified, real-world dataset based on popular video games.

Create a database in SQLite and execute the given script file with the **.read** command to load the provided dataset. After successfully setting up the database, perform the following SQL queries:

1. Using a **CASE** expression, create a new column in the result set that categorizes each game based on its rating as:
  - a. **Excellent** ( $\text{rating} \geq 90$ )
  - b. **Good** ( $80 \leq \text{rating} < 90$ )
  - c. **Average** ( $\text{rating} < 80$ )
2. Using a **CASE** expression, create a new column that labels each game based on its price as:
  - a. **Free** ( $\$0$ )
  - b. **Budget** ( $\leq \$15$ )
  - c. **Premium** ( $> \$15$ )



3. Find how many games belong to each genre.
4. Compute average critic rating for each platform.
5. For each genre, find the maximum global sales.
6. Display the names of publishers whose average game rating is greater than 90.
7. Using a **CASE** expression, create a new column that categorizes games based on their global sales into:
  - a. **Blockbuster** (>100M)
  - b. **Hit** (30–100M)
  - c. **Flop** (<30M)
8. Count how many games each platform has released since 2016.
9. Display the names of genres whose total global sales exceed 100 million units.
10. Display the average rating of both free and paid games.
11. Show publishers that have released more than 2 games.
12. Find average rating per platform per genre.
13. Display the top three highest-rated games along with their titles and ratings.
14. Which platform has the lowest average global sales?
15. Identify the most common platform and genre combinations.