PG-DAC AUGUST 25
Database Assignment 2

Schema Design & Table Creation (DDL & DML Commands)

1. Define a schema for a Library Management System with the following entities:
   - Books
   - Authors
   - Members
   - Borrow_Records

2. Write the SQL command to create a table Authors with the following fields:
   - author_id (Primary Key, INT)
   - name (VARCHAR(100))
   - country (VARCHAR(50))

3. Write the SQL command to create a table Books with the following fields:
   - book_id (Primary Key, INT)
   - title (VARCHAR(150))
   - author_id (Foreign Key referencing Authors)
   - published_year (YEAR)
   - available_copies (INT)

4. Write the SQL command to create a table Members with:
   - member_id (Primary Key, INT)
   - name (VARCHAR(100))
   - email (VARCHAR(100), unique)
   - phone (VARCHAR(15))

5. Write the SQL command to create a table Borrow_Records with:
   - record_id (Primary Key, INT)
   - member_id (Foreign Key referencing Members)
   - book_id (Foreign Key referencing Books)
   - borrow_date (DATE)
   - return_date (DATE)

6. Modify the Books table to add a column genre of type VARCHAR(50).

7. Write the SQL command to drop the Borrow_Records table.

8. Insert 3 records into the Authors table.

9. Insert 5 books into the Books table.

10. Insert 3 members into the Members table.

11. Insert 4 borrow records into the Borrow_Records table.

12. Write an SQL query to select all books where published_year is after 2015.

13. Write a SQL query to create a foreign key & primary key relationship between two tables.

14. Write an SQL query to find all members who have borrowed the book with title 'Database Systems'.

15. Update the available_copies column of a specific book (choose any book) by reducing it by 1 after it is borrowed.

16. Delete a record from Members where member_id = 3.

17. Update a Book name record from Book table with id = 1.

18. Write an SQL query to list all books along with their authors' names.

19. Write an SQL query to delete all books from the Books table where the published_year is before 2000.

20. Write an SQL query to **find all books that are never borrowed (i.e., no records in `Borrow_Records`)**.