

# PG-DAC AUGUST 25

## Assignment No- 5

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Write Create a Employee ,Department & Project Tables .Add atleast 5 records in each table & Write a following Queries.

1. Write a Relational Algebra expression to perform **Cartesian Product (Cross Join)** between Emp and Dept tables.
2. Write a SQL query to perform an **INNER JOIN** between Emp and Dept tables displaying EmpName and DeptName.
3. Write a SQL query to perform a **LEFT OUTER JOIN** between Emp and Dept tables to display all employees along with their department information, including employees without a department.
4. Write a SQL query to perform a **RIGHT OUTER JOIN** between Emp and Dept tables.
5. Write a SQL query to perform a **NATURAL JOIN** between Emp and Dept.
6. Write a SQL query to perform a **CROSS JOIN** between Emp and Project table.
7. Write a SQL query to **create a new table EmpBackup with the same structure as Emp but no data.**
8. Write a SQL query to **copy all data from Emp into EmpBackup table.**
9. Write a SQL query to **create a new table ProjectArchive with the same structure and data as Project.**
10. Write a SQL query to create an **AUTO\_INCREMENT** sequence for EmpID in the Emp table during table creation.
11. Write a SQL query using a **subquery** to find all employees whose salary is greater than the **average salary of all employees.**
12. Write a SQL query using a **subquery in WHERE clause** to find employees working in departments located in 'Mumbai'.
13. Write a SQL query to display all departments where the number of employees is greater than 5, using a subquery.
14. Write a subqueries for find out Max salary of employee.
15. Write a self join query for each table.