

Assignment – 1

Question 1: Basic INNER JOIN Consider two tables: Customers and Orders. Write an SQL query to retrieve the names of customers who have placed orders.

Question 2: LEFT JOIN with NULLs Using the same tables as above, write an SQL query to retrieve the names of customers along with their order information. Include customers who have not placed any orders.

Question 3: Self-JOIN Given a table named Employees with columns Employee ID, Name, and Manager ID, write an SQL query to retrieve the names of employees and their corresponding managers' names.

Question 4: Multiple JOINS Imagine tables Products, Orders, and Order Items. Write an SQL query to retrieve the total quantity of each product ordered, along with the product name and order date.

Question 5: Using aliases in JOIN Using the same tables as above, rewrite the previous query using table aliases for conciseness.

Question 6: JOIN with Aggregation Given tables Departments and Employees, write an SQL query to find the department names and the average salary of employees in each department.

Question 7:

OUTER JOINS Consider tables Students and Grades. Write an SQL query to retrieve the names of all students along with their corresponding grades. If a student does not have a grade, display "N/A".

Question 8: Self-JOIN for Hierarchical Data Given a table Categories with columns Category ID, Name, and Parent Category ID, write an SQL query to retrieve the names of all categories along with their parent category names.

Question 9: JOIN with Conditions Suppose you have tables Employees and Projects. Write an SQL query to find the names of employees who are working on more than one project.

Question 10: Combining JOIN Types Using tables Customers, Orders, and Payments, write an SQL query to retrieve customer names and the total amount they have paid. Include all customers, even those who have not made any payments.