ASSIGNMENT 5

1.Write an SQL query to display the second highest salary from an Employees table.

SELECT MAX(salary) AS second_highest_salary

FROM Employees

WHERE salary < (SELECT MAX(salary) FROM Employees);

2.Given a table Orders(order_id, customer_id, order_date, amount), write a query to find the total order amount per customer, but display only customers whose total exceeds 50,000.

SELECT customer_id, SUM(amount) AS total_amount

FROM Orders

GROUP BY customer_id

HAVING SUM(amount) > 50000;

3.Write an SQL query to find the number of employees in each department, excluding departments with fewer than 3 employees.

SELECT department_id, COUNT(*) AS emp_count

FROM Employees

GROUP BY department_id

HAVING COUNT(*) >= 3;

4.Given tables Students(student_id, name) and Marks(student_id, subject, marks), write a query to find students who have scored more than 80 in at least two subjects.

SELECT student_id

FROM Marks

WHERE marks > 80

GROUP BY student_id

HAVING COUNT(DISTINCT subject) >= 2;

5.Write an SQL query to retrieve the names of employees who earn more than the average salary of their department.

SELECT e.name

FROM Employees e

WHERE e.salary >

(

  SELECT AVG(salary)

  FROM Employees

  WHERE department_id = e.department_id

);

6.Given a table Sales(sale_id, product_id, sale_date, quantity), write a query to find the total quantity sold for each product in the year 2024.

SELECT product_id, SUM(quantity) AS total_quantity

FROM Sales

WHERE YEAR(sale_date) = 2024

GROUP BY product_id;

7.Write an SQL query to display the top 3 highest-paid employees from each department.

SELECT *

FROM (

  SELECT *,

     DENSE_RANK() OVER (PARTITION BY department_id ORDER BY salary DESC) AS rnk

  FROM Employees

) t

WHERE rnk <= 3;

8.Given a table Customers(customer_id, customer_name, city), write a query to find cities that have more than 5 customers.

SELECT city

FROM Customers

GROUP BY city

HAVING COUNT(*) > 5;

9.Write an SQL query to find employees who do not have any records in the Attendance table.

SELECT e.*

FROM Employees e

LEFT JOIN Attendance a ON e.employee_id = a.employee_id

WHERE a.employee_id IS NULL;

10.Given a table Employees(employee_id, name, manager_id), write an SQL query to display each employee's name along with their manager's name.

SELECT e.name AS employee_name,

    m.name AS manager_name

FROM Employees e

LEFT JOIN Employees m

ON e.manager_id = m.employee_id;