
-----ASSIGNMENT - 1-----

1) Create two tables: EmployeeDetails and EmployeeSalary.

Columns for EmployeeDetails: EmpId FullName ManagerId DateOfJoining City && Columns for EmployeeSalary: : EmpId Project Salary Variable.

2) SQL Query to fetch records that are present in one table but not in another table.

3) SQL query to fetch all the employees who are not working on any project.

4) SQL query to fetch all the Employees from EmployeeDetails who joined in the Year 2020.

5) Fetch all employees from EmployeeDetails who have a salary record in EmployeeSalary.

6) Write an SQL query to fetch a project-wise count of employees.

7) Fetch employee names and salaries even if the salary value is not present for the employee.

8) Write an SQL query to fetch all the Employees who are also managers.

9) Write an SQL query to fetch duplicate records from EmployeeDetails.

10) Write an SQL query to fetch only odd rows from the table.

11) Write a query to find the 3rd highest salary from a table without top or limit keyword.

-----ANSWERS-----

1) Create two tables: EmployeeDetails and EmployeeSalary.

Columns for EmployeeDetails: EmpId FullName ManagerId DateOfJoining City && Columns for EmployeeSalary: : EmpId Project Salary Variable.

```
-- Create EmployeeDetails table
CREATE TABLE EmployeeDetails (
    EmpId INT PRIMARY KEY,
    FullName VARCHAR(100) NOT NULL,
    ManagerId INT,
    DateOfJoining DATE NOT NULL,
    City VARCHAR(50)
);
```

```
-- Insert sample data into EmployeeDetails
INSERT INTO EmployeeDetails (EmpId, FullName, ManagerId, DateOfJoining, City)
VALUES (1, 'John Doe', NULL, '2020-01-01', 'New York'),
(2, 'Jane Smith', 1, '2020-02-15', 'Boston'),
(3, 'Bob Johnson', 1, '2020-03-01', 'Chicago'),
(4, 'Alice Brown', 2, '2020-04-01', 'San Francisco'),
(5, 'David Lee', 2, '2020-05-01', 'Los Angeles'),
(6, 'Steve Smith', NULL, '2019-05-01', 'Sydney');
```

```
-- Create EmployeeSalary table
CREATE TABLE EmployeeSalary (
```

```
EmpId INT PRIMARY KEY,  
Project VARCHAR(100),  
Salary DECIMAL(10,2),  
Variable DECIMAL(10,2)  
);  
  
-- Insert sample data into EmployeeSalary  
INSERT INTO EmployeeSalary (EmpId, Project, Salary, Variable)  
VALUES (1, 'Project A', 5000.00, 1000.00),  
       (2, 'Project B', 6000.00, 1200.00),  
       (3, 'Project C', 5500.00, 1100.00),  
       (4, 'Project B', 6500.00, 1300.00),  
       (5, NULL, NULL, NULL);
```

2) SQL Query to fetch records that are present in one table but not in another table.

```
SELECT EmpId, FullName  
FROM EmployeeDetails  
WHERE EmpId NOT IN (SELECT EmpId FROM EmployeeSalary)
```

3) SQL query to fetch all the employees who are not working on any project.

```
SELECT EmpId, FullName  
FROM EmployeeDetails  
WHERE EmpId NOT IN (SELECT EmpId FROM EmployeeSalary WHERE Project IS NOT NULL)
```

4) SQL query to fetch all the Employees from EmployeeDetails who joined in the Year 2020:

```
SELECT *  
FROM EmployeeDetails  
WHERE YEAR(DateOfJoining) = 2020
```

5) Fetch all employees from EmployeeDetails who have a salary record in EmployeeSalary:

```
SELECT *  
FROM EmployeeDetails  
WHERE EmpId IN (SELECT EmpId FROM EmployeeSalary)
```

6) Write an SQL query to fetch a project-wise count of employees:

```
SELECT Project, COUNT(*) AS EmployeeCount  
FROM EmployeeSalary  
GROUP BY Project
```

7) Fetch employee names and salaries even if the salary value is not present for the employee:

```
SELECT EmployeeDetails.FullName, EmployeeSalary.Salary  
FROM EmployeeDetails  
LEFT JOIN EmployeeSalary ON EmployeeDetails.EmpId = EmployeeSalary.EmpId
```

8) Write an SQL query to fetch all the Employees who are also managers:

```
SELECT e1.FullName
FROM EmployeeDetails e1
INNER JOIN EmployeeDetails e2 ON e1.EmpId =
```

9) Write an SQL query to fetch duplicate records from EmployeeDetails:

```
SELECT EmpId, COUNT(*) AS DuplicateCount
FROM EmployeeDetails
GROUP BY EmpId
HAVING COUNT(*) > 1
```

10) Write an SQL query to fetch only odd rows from the table:

```
SELECT *
FROM EmployeeDetails
WHERE EmpId % 2 <> 0
```

11) Write a query to find the 3rd highest salary from a table without the top or limit keyword:

```
SELECT DISTINCT Salary
FROM EmployeeSalary e1
WHERE 3 = (
    SELECT COUNT(DISTINCT Salary)
    FROM EmployeeSalary e2
    WHERE e2.Salary >= e1.Salary
)
```
