

ASSIGNMENT-6

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```
CREATE TABLE DEPT (  
    DEPTNO INT PRIMARY KEY,  
    DEPTNAME VARCHAR(30)  
);
```

```
CREATE TABLE EMP (  
    EMPNO INT PRIMARY KEY,  
    EMPNAME VARCHAR(30),  
    DEPTNO INT,  
    JOB VARCHAR(30),  
    SALARY DECIMAL(10, 2),  
    FOREIGN KEY (DEPTNO) REFERENCES DEPT(DEPTNO)  
);
```

-- 1. Insert 10 appropriate records in each table as per the SQL queries mentioned below.

-- INSERTING RECORDS INTO DEPT TABLE

```
INSERT INTO DEPT VALUES (10, 'SALES');
```

```
INSERT INTO DEPT VALUES (20, 'MARKETING');
```

```
INSERT INTO DEPT VALUES (30, 'IT');
```

```
INSERT INTO DEPT VALUES (40, 'FINANCE');
```

```
INSERT INTO DEPT VALUES (50, 'HR');
```

```
INSERT INTO DEPT VALUES (60, 'ADMIN');
```

```
INSERT INTO DEPT VALUES (70, 'OPERATIONS');
```

```
INSERT INTO DEPT VALUES (80, 'LOGISTICS');
```

```
INSERT INTO DEPT VALUES (90, 'R&D');
```

```
INSERT INTO DEPT VALUES (100, 'LEGAL');
```

-- INSERTING RECORDS INTO EMP TABLE

INSERT INTO EMP VALUES (101, 'JOHN DOE', 10, 'SALES MANAGER', 75000.00);

INSERT INTO EMP VALUES (102, 'JANE SMITH', 10, 'SALES EXECUTIVE', 50000.00);

INSERT INTO EMP VALUES (103, 'SAMUEL GREEN', 20, 'MARKETING HEAD', 85000.00);

INSERT INTO EMP VALUES (104, 'NANCY BROWN', 20, 'MARKETING EXECUTIVE', 55000.00);

INSERT INTO EMP VALUES (105, 'JAMES WHITE', 30, 'SOFTWARE ENGINEER', 95000.00);

INSERT INTO EMP VALUES (106, 'ROBERT BLACK', 30, 'SYSTEM ANALYST', 70000.00);

INSERT INTO EMP VALUES (107, 'ALICE GRAY', 40, 'FINANCIAL ANALYST', 65000.00);

INSERT INTO EMP VALUES (108, 'EVE BLUE', 50, 'HR MANAGER', 80000.00);

INSERT INTO EMP VALUES (109, 'CHRIS RED', 60, 'ADMIN ASSISTANT', 45000.00);

INSERT INTO EMP VALUES (110, 'MICHAEL YELLOW', 70, 'OPERATIONS MANAGER', 90000.00);

-- 2. List the total number of employees?

SELECT COUNT(*) AS TOTAL_EMPLOYEES FROM EMP;

-- 3. List the total no of departments?

SELECT COUNT(*) FROM DEPT;

-- 4. Display the employee details of each department for which they are working

SELECT E.EMPNO, E.EMPNAME, E.DEPTNO, E.JOB, D.DEPTNAME, E.SALARY FROM EMP E,
DEPT D WHERE E.DEPTNO = D.DEPTNO;

-- 5. List the total, maximum, & minimum salary for deptno 30?

SELECT DEPTNO, SUM(SALARY), MAX(SALARY), MIN(SALARY) FROM EMP GROUP BY DEPTNO
HAVING DEPTNO=30;

-- 6. Display the name of the employee getting maximum salary?

```
SELECT EMPNAME FROM EMP WHERE SALARY=(  
    SELECT MAX(SALARY) FROM EMP  
)
```

-- 7. Display the total salary for each department?

```
SELECT D.DEPTNAME, SUM(E.SALARY) AS TOTAL_SALARY FROM EMP E JOIN DEPT D ON  
E.DEPTNO = D.DEPTNO GROUP BY D.DEPTNAME;
```

-- 8. Display the total salary for each job.

```
SELECT E.JOB, SUM(E.SALARY) AS TOTAL_SALARY FROM EMP E GROUP BY E.JOB;
```

-- 9. Display the total salary for each job within each department.

```
SELECT E.JOB, D.DEPTNAME, SUM(E.SALARY) AS TOTAL_SALARY FROM EMP E JOIN DEPT D  
ON E.DEPTNO = D.DEPTNO GROUP BY E.JOB, D.DEPTNAME;
```

-- 10. Display the average salary for each job in deptno 20.

```
SELECT E.JOB, AVG(E.SALARY) AS AVG_SALARY FROM EMP E WHERE E.DEPTNO = 20 GROUP  
BY E.JOB;
```

-- 11. Display the total salary for each job excluding the 'manager' and 'salesman' job.

```
SELECT E.JOB, SUM(E.SALARY) AS TOTAL_SALARY FROM EMP E WHERE E.JOB NOT IN  
( 'MANAGER', 'SALESMAN' ) GROUP BY E.JOB;
```

-- 12. Display the average salary for each job in deptno 20, but only display those jobs where

```
SELECT E.JOB, AVG(E.SALARY) AS AVG_SALARY FROM EMP E WHERE E.DEPTNO = 20 GROUP  
BY E.JOB HAVING AVG(E.SALARY) > 2000 ORDER BY AVG(E.SALARY) DESC;
```

-- 13. Display the total no of employees for each department excluding the deptno 10 & display only those departments where more than five employees work. Display the output in descending order of total no of employees?

```
SELECT D.DEPTNAME, COUNT(E.EMPNO) AS TOTAL_EMPLOYEES FROM EMP E JOIN DEPT D
ON E.DEPTNO = D.DEPTNO WHERE D.DEPTNO <> 10 GROUP BY D.DEPTNAME HAVING
COUNT(E.EMPNO) > 5 ORDER BY TOTAL_EMPLOYEES DESC;
```

-- 14. Display the total no of employees for each department excluding the 'comp' dept & display only those departments where more than five employees work. Display the output in descending order of total no of employees?

```
SELECT D.DEPTNAME, COUNT(E.EMPNO) AS TOTAL_EMPLOYEES FROM EMP E JOIN DEPT D
ON E.DEPTNO = D.DEPTNO WHERE D.DEPTNAME <> 'COMP' GROUP BY D.DEPTNAME
HAVING COUNT(E.EMPNO) > 5 ORDER BY TOTAL_EMPLOYEES DESC;
```

-- 15. Display total number of emp working in each job in each dept.

```
SELECT D.DEPTNAME, E.JOB, COUNT(E.EMPNO) AS TOTAL_EMPLOYEES FROM EMP E JOIN
DEPT D ON E.DEPTNO = D.DEPTNO GROUP BY D.DEPTNAME, E.JOB;
```

-- 16. List all the department name and their employees name even if for a department there is no employees (A newly created department)

```
SELECT D.DEPTNAME, E.EMPNAME FROM DEPT D LEFT JOIN EMP E ON D.DEPTNO =
E.DEPTNO;
```

-- 17. List all the employees name and their department name even if for an employee there is no department assigned (A newly joined employee).

```
SELECT E.EMPNAME, D.DEPTNAME FROM EMP E LEFT JOIN DEPT D ON E.DEPTNO =
D.DEPTNO;
```

-- 18. List all the departments name and their employees name irrespective whether for a department any employees are there are not, and irrespective whether for an employee there is any department assigned or not.

```
SELECT D.DEPTNAME, E.EMPNAME FROM DEPT D LEFT JOIN EMP E ON D.DEPTNO =
E.DEPTNO UNION SELECT D.DEPTNAME, E.EMPNAME FROM EMP E LEFT JOIN DEPT D ON
E.DEPTNO = D.DEPTNO;
```