

Database and Management System Lab

Lab Experiment – 10

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B.Tech CSE, SEM-III, B-2

**Title: Create the following views in SQL on the COMPANY
database schema presented in Experiment 2**

1. A view that has the department name, manager name, and manager salary for every department.

```
CREATE VIEW dept_manager_view AS
SELECT D.Dname AS department_name, E.Fname AS manager_name, E.Salary AS
manager_salary
FROM department D
JOIN employee E ON D.Mgr_ssn = E.Ssn;
```

department_name	manager_name	manager_salary
Research	Franklin	40000.00
Administration	Jennifer	43000.00

2. A view that has the employee name, supervisor name, and employee salary for each employee who works in the 'Research' department

```
CREATE VIEW research_employee_view AS
SELECT E1.Fname AS employee_name, E2.Fname AS supervisor_name, E1.Salary AS
employee_salary
FROM employee E1
JOIN employee E2 ON E1.Super_ssn = E2.Ssn
JOIN department D ON E1.Dno = D.Dnumber
WHERE D.Dname = 'Research';
```

employee_name	supervisor_name	employee_salary
John	Franklin	30000.00

3. A view that has the project name, controlling department name, number of employees, and total hours worked per week on the project for each project.

```
CREATE VIEW project_summary_view AS
SELECT P.Pname AS project_name, D.Dname AS controlling_department,
       COUNT(DISTINCT W.Essn) AS num_employees, SUM(W.Hours) AS total_hours
FROM project P
JOIN department D ON P.Dnum = D.Dnumber
JOIN works_on W ON P.Pnumber = W.Pno
GROUP BY P.Pname, D.Dname;
```

project_name	controlling_department	num_employees	total_hours
ProductX	Research	2	40.0
ProductY	Research	2	17.5

4. A view that has the project name, controlling department name, number of employees, and total hours worked per week on the project for each project with more than one employee working on it.

```
CREATE VIEW multi_employee_project_view AS
SELECT P.Pname AS project_name, D.Dname AS controlling_department,
       COUNT(DISTINCT W.Essn) AS num_employees, SUM(W.Hours) AS total_hours
FROM project P
JOIN department D ON P.Dnum = D.Dnumber
JOIN works_on W ON P.Pnumber = W.Pno
GROUP BY P.Pname, D.Dname
HAVING COUNT(DISTINCT W.Essn) > 1;
```

project_name	controlling_department	num_employees	total_hours
ProductX	Research	2	40.0

```
DROP INDEX last_name_upper_idx ON EMPLOYEES;
```