

RAJALAKSHMI ENGINEERING COLLEGE  
RAJALAKSHMI NAGAR, THANDALAM – 602 105



RAJALAKSHMI  
ENGINEERING  
COLLEGE

CS23332 DATABASE MANAGEMENT  
SYSTEMS LAB

Laboratory Record Note Book

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Year / Branch / Section : 2025 / CSE - Cyber Security

University Register No. : 2116241901007

College Roll No. : 241901007

Semester : III

Academic Year : 2024 - 28



**RAJALAKSHMI**  
**ENGINEERING COLLEGE**  
An Autonomous Institution  
Affiliated to ANNA UNIVERSITY, Chennai

**BONAFIDE CERTIFICATE**

NAME P.M. Arunesh  
ACADEMIC YEAR 2024-25 SEMESTER 3rd BRANCH CSE - Cyber Security

UNIVERSITY REGISTER NO. 2116241901001

Certified that this is the bonafide record of work done by the above student in the

Database management System Laboratory during the year 2025 - 2026

[Signature]

Signature of Faculty - in - Charge

Submitted for the Practical Examination held on .....

Internal Examiner

External Examiner

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Branch : CSE-CS Sec : A

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This query retrieves all rows in the EMPLOYEES table, even if there is no match in the DEPARTMENTS table. It also retrieves all rows in the DEPARTMENTS table, even if there is no match in the EMPLOYEES table.

Find the Solution for the following:

1. Write a query to display the last name, department number, and department name for all employees.

```
SELECT l.last_name, l.department_id, department_name
FROM employees JOIN department d ON
d - department - id;
```

2. Create a unique listing of all jobs that are in department 80. Include the location of the department in the output.

```
SELECT DISTINCT e.job_id, d.location_id,
l-city FROM employees e JOIN departments d ON e-department
-id - d - department = d - department - id JOIN location
Lond. location - id = l - location WHERE
```

3. Write a query to display the employee last name, department name, location ID, and city of all employees who earn a commission

```
SELECT l.last_name, d.department_name, l-
location_id, - city FROM employees, l JOIN department
ON e-department WHERE - l. commission - Pct IS
NOT NULL;
```

4. Display the employee last name and department name for all employees who have an a(lowercase) in their last names. P

```
SELECT l-last_name, d-department_name FROM
employees l JOIN department - id WHERE l.last_name
LIKE ' % a % ';
```

5. Write a query to display the last name, job, department number, and department name for all employees who work in Toronto.

```
SELECT l.last_name, l.job_id, l.department_id,
d-department_name FROM employees l JOIN department
ON l - department - id = d. department; d JOIN location
ON WHERE city = Toronto;
```



6. Display the employee last name and employee number along with their manager's last name and manager number. Label the columns Employee, Emp#, Manager, and Mgr#, Respectively

```
SELECT e.last_name AS Employee, e.employee_id
AS Emp#, m.last_name AS manager, m.employee_id
AS mgr# FROM employees e LEFT JOIN employees
m ON e.manager_id = m.employee_id;
```

7. Modify lab4\_6.sql to display all employees including King, who has no manager. Order the results by the employee number.

```
SELECT e.last_name AS Employee, e.employee_id AS
Emp#, m.last_name AS manager, m.employee_id
AS mgr# FROM employees e ON e.manager_id = m
employee_id;
```

8. Create a query that displays employee last names, department numbers, and all the employees who work in the same department as a given employee. Give each column an appropriate label

```
SELECT e1.last_name AS Employee, e1.department_id
AS DEPT_ID, e2.last_name AS colleague FROM
employees e1 JOIN employees e2 ON e1.department_id = e2.department_id;
```

9. Show the structure of the JOB\_GRADES table. Create a query that displays the name, job, department name, salary, and grade for all employees

```
DESCRIBE job_grades; SELECT e.last_name, e.job_id,
d.department_name, e.salary, j.grade_level FROM
employees e JOIN departments d ON e.department_id = d.department_id;
```

10. Create a query to display the name and hire date of any employee hired after employee Davies.

```
SELECT e.last_name, e.hire_date FROM
employees e WHERE e.hire_date > (SELECT hire_date
FROM employees WHERE last_name = 'Davies');
```

11. Display the names and hire dates for all employees who were hired before their managers, along with their manager's names and hire dates. Label the columns Employee, Emp Hired, Manager, and Mgr Hired, respectively.

```
SELECT e.last_name AS Employee, e.hire_date
AS Emp_Hired, m.last_name AS Manager,
m.hire_date AS Mgr_Hired, FROM employees
JOIN employees ON e.manager_id;
```

Evaluation Procedure	Marks awarded
Query(5)	5
Execution (5)	5
Viva(5)	5
Total (15)	15
Faculty Signature	P. L.