

## LAB 5

### QUERRIES

1.

```
SELECT e.Emp_No, e.Emp_Name, e.Job_Role, d.Dept_Name,  
d.Dept_Location
```

```
FROM Employee e
```

```
JOIN Department d ON e.Dept_No = d.Dept_No;
```

```
106 • SELECT e.Emp_No, e.Emp_Name, e.Job_Role, d.Dept_Name, d.Dept_Location  
107 FROM Employee e  
108 JOIN Department d ON e.Dept_No = d.Dept_No;  
109
```

Emp_No	Emp_Name	Job_Role	Dept_Name	Dept_Location
101	Asha	Manager	HR	Bengaluru
102	Kiran	Analyst	IT	Hyderabad
103	Ravi	Clerk	Finance	Mysuru
104	Manu	Developer	IT	Hyderabad
105	Deepa	Tester	R&D	Bengaluru
106	Rohit	HR Executive	HR	Bengaluru

2.

```
SELECT Emp_No, Emp_Name
```

```
FROM Employee
```

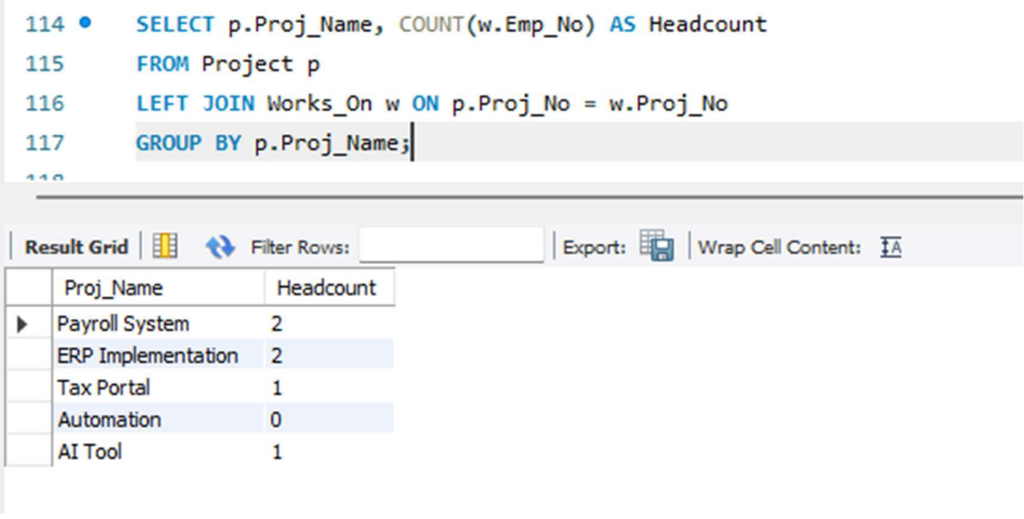
```
WHERE Emp_No NOT IN (SELECT Emp_No FROM Works_On);
```

```
110 • SELECT Emp_No, Emp_Name  
111 FROM Employee  
112 WHERE Emp_No NOT IN (SELECT Emp_No FROM Works_On);  
113
```

Emp_No	Emp_Name
*	NULL

2.

```
SELECT p.Proj_Name, COUNT(w.Emp_No) AS Headcount
FROM Project p
LEFT JOIN Works_On w ON p.Proj_No = w.Proj_No
GROUP BY p.Proj_Name;
```



The screenshot shows a SQL query editor with the following code:

```
114 • SELECT p.Proj_Name, COUNT(w.Emp_No) AS Headcount
115 FROM Project p
116 LEFT JOIN Works_On w ON p.Proj_No = w.Proj_No
117 GROUP BY p.Proj_Name;
```

Below the query editor is a 'Result Grid' with the following data:

Proj_Name	Headcount
Payroll System	2
ERP Implementation	2
Tax Portal	1
Automation	0
AI Tool	1

3.

```
SELECT d.Dept_Name,
       AVG(e.Salary) AS Avg_Salary,
       MAX(e.Salary) AS Max_Salary
FROM Employee e
JOIN Department d ON e.Dept_No = d.Dept_No
GROUP BY d.Dept_Name;
```

```

119 • SELECT d.Dept_Name,
120         AVG(e.Salary) AS Avg_Salary,
121         MAX(e.Salary) AS Max_Salary
122 FROM Employee e
123 JOIN Department d ON e.Dept_No = d.Dept_No
124 GROUP BY d.Dept_Name;
125

```

Result Grid	Filter Rows:	Export:	Wrap Cell Content:
Dept_Name	Avg_Salary	Max_Salary	
HR	60000.000000	75000.00	
IT	57500.000000	60000.00	
Finance	40000.000000	40000.00	
R&D	50000.000000	50000.00	

4.

```

SELECT e.Emp_Name, SUM(i.Amount) AS Total_Incentive
FROM Employee e
LEFT JOIN Incentives i ON e.Emp_No = i.Emp_No
GROUP BY e.Emp_Name;

```

```

126 • SELECT e.Emp_Name, SUM(i.Amount) AS Total_Incentive
127 FROM Employee e
128 LEFT JOIN Incentives i ON e.Emp_No = i.Emp_No
129 GROUP BY e.Emp_Name;
130

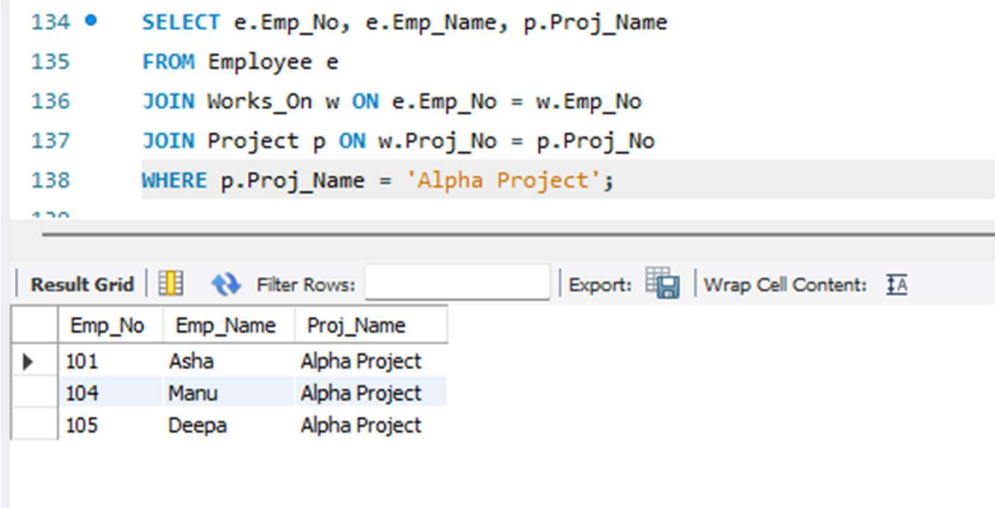
```

Result Grid	Filter Rows:	Export:	Wrap Cell Content:
Emp_Name	Total_Incentive		
Asha	2000.00		
Kiran	1500.00		
Ravi	1000.00		
Manu	NULL		
Deepa	1800.00		
Rohit	NULL		

5.

```
INSERT INTO Project VALUES (206, 'Alpha Project', 'Bengaluru', 1);  
INSERT INTO Works_On VALUES (101, 206), (104, 206), (105, 206);
```

```
SELECT e.Emp_No, e.Emp_Name, p.Proj_Name  
FROM Employee e  
JOIN Works_On w ON e.Emp_No = w.Emp_No  
JOIN Project p ON w.Proj_No = p.Proj_No  
WHERE p.Proj_Name = 'Alpha Project';
```



The screenshot shows a SQL query editor with the following code:

```
134 • SELECT e.Emp_No, e.Emp_Name, p.Proj_Name  
135 FROM Employee e  
136 JOIN Works_On w ON e.Emp_No = w.Emp_No  
137 JOIN Project p ON w.Proj_No = p.Proj_No  
138 WHERE p.Proj_Name = 'Alpha Project';  
139
```

Below the editor is a 'Result Grid' with the following data:

	Emp_No	Emp_Name	Proj_Name
▶	101	Asha	Alpha Project
	104	Manu	Alpha Project
	105	Deepa	Alpha Project

6.

```
SELECT d.Dept_Name, d.Dept_No  
FROM Department d  
LEFT JOIN Employee e ON d.Dept_No = e.Dept_No  
WHERE e.Emp_No IS NULL;
```

```

140 • SELECT d.Dept_Name, d.Dept_No
141 FROM Department d
142 LEFT JOIN Employee e ON d.Dept_No = e.Dept_No
143 WHERE e.Emp_No IS NULL;

```

Result Grid	Filter Rows:	Export:	Wrap Cell Content:
Dept_Name	Dept_No		
Admin	4		

7.

```

SELECT m.Emp_Name AS Manager, COUNT(e.Emp_No) AS Report_Count
FROM Employee m
JOIN Employee e ON m.Emp_No = e.Mgr_No
GROUP BY m.Emp_Name;

```

```

145 • SELECT m.Emp_Name AS Manager, COUNT(e.Emp_No) AS Report_Count
146 FROM Employee m
147 JOIN Employee e ON m.Emp_No = e.Mgr_No
148 GROUP BY m.Emp_Name;

```

Result Grid	Filter Rows:	Export:	Wrap Cell Content:
Manager	Report_Count		
Asha	5		

8.

```

SELECT e.Emp_No, e.Emp_Name, COUNT(w.Proj_No) AS Project_Count
FROM Employee e
JOIN Works_On w ON e.Emp_No = w.Emp_No
GROUP BY e.Emp_No, e.Emp_Name
HAVING COUNT(w.Proj_No) > 1;

```

```

150 • SELECT e.Emp_No, e.Emp_Name, COUNT(w.Proj_No) AS Project_Count
151 FROM Employee e
152 JOIN Works_On w ON e.Emp_No = w.Emp_No
153 GROUP BY e.Emp_No, e.Emp_Name
154 HAVING COUNT(w.Proj_No) > 1;
155

```

Result Grid   Filter Rows:  | Export:  | Wrap Cell Content: 

	Emp_No	Emp_Name	Project_Count
▶	101	Asha	2
	104	Manu	2
	105	Deepa	2