Query 1

```
133     FROM Employee e
134     JOIN Employee m ON e.manager_id = m.emp_id
135     WHERE e.dept_id = m.dept_id;
136
137     -- ============================================================
138     -- ◦ ADDITIONAL ANALYSIS QUERIES (NO NEW TABLES)
139     -- ============================================================
140
141     -- Employees with department name & location
142     SELECT e.emp_id, e.emp_name, d.dept_name, d.dept_location
143     FROM Employee e
144     JOIN Department d ON e.dept_id = d.dept_id;
145
146     -- Employees not assigned to any project (dept has no project)
147     SELECT e.emp_id, e.emp_name
148     FROM Employee e
149     WHERE e.dept_id NOT IN (SELECT dept_id FROM Project);
150
151     -- Project-wise headcount (by dept link)
152     SELECT p.project_name, COUNT(e.emp_id) AS Headcount
153     FROM Project p
154     LEFT JOIN Employee e ON p.dept_id = e.dept_id
155     GROUP BY p.project_name;
156
```

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

emp_id	emp_name	dept_name	dept_location
1	Ravi	HR	Bengaluru
2	Kiran	HR	Bengaluru
3	Asha	Finance	Hyderabad
4	Ramesh	Finance	Hyderabad
5	Divya	R&D	Mysuru
6	Suman	R&D	Mysuru

```sql
-- Employees not assigned to any project (dept has no project)
SELECT e.emp_id, e.emp_name
FROM Employee e
WHERE e.dept_id NOT IN (SELECT dept_id FROM Project);

-- Project-wise headcount (by dept link)
SELECT p.project_name, COUNT(e.emp_id) AS Headcount
FROM Project p
LEFT JOIN Employee e ON p.dept_id = e.dept_id
GROUP BY p.project_name;
```

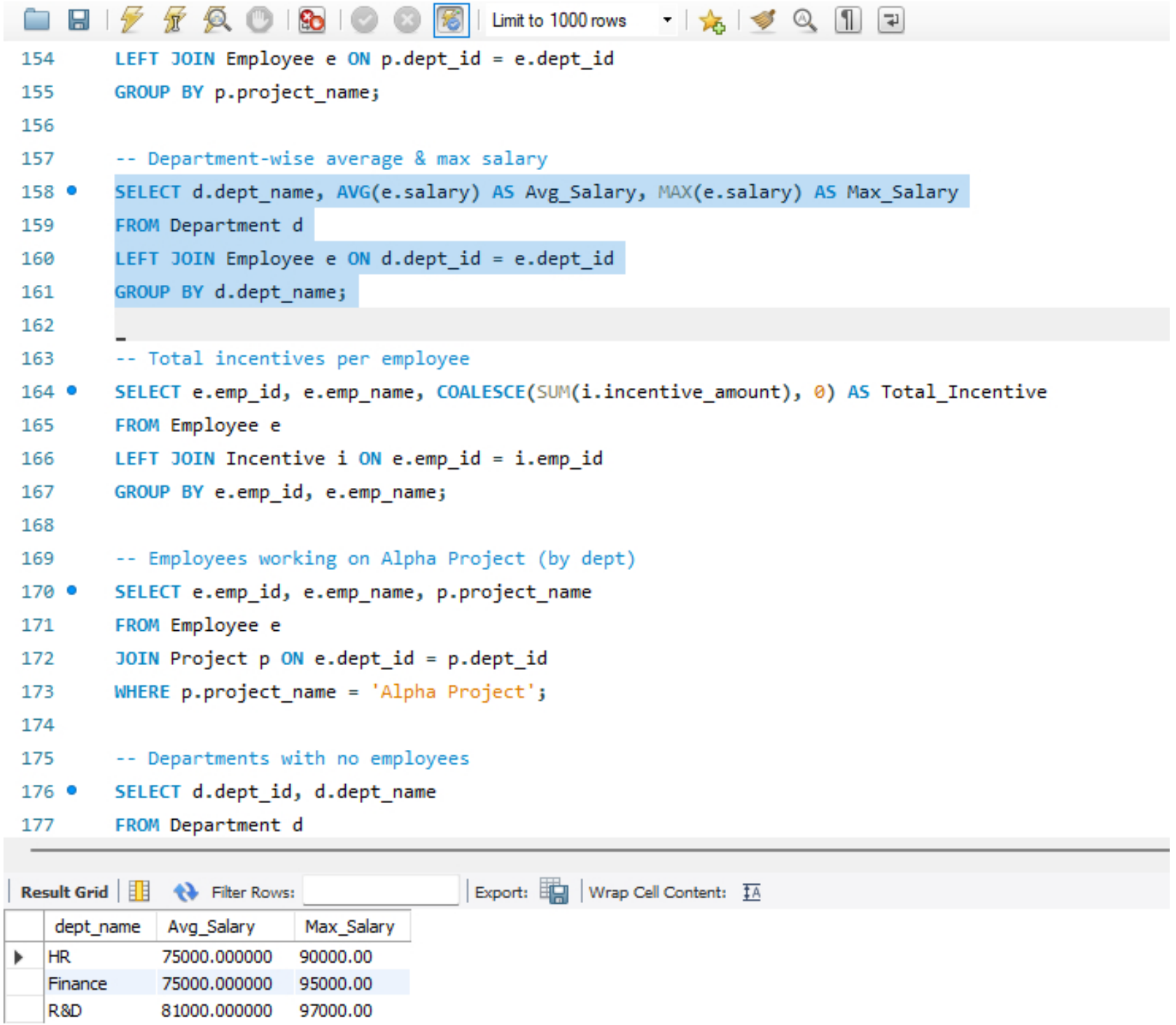
Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

	emp_id	emp_name
*	NULL	NULL

```sql
-- Project-wise headcount (by dept link)
SELECT p.project_name, COUNT(e.emp_id) AS Headcount
FROM Project p
LEFT JOIN Employee e ON p.dept_id = e.dept_id
GROUP BY p.project_name;

-- Department-wise average & max salary
SELECT d.dept_name, AVG(e.salary) AS Avg_Salary, MAX(e.salary) AS Max_Salary
FROM Department d
LEFT JOIN Employee e ON d.dept_id = e.dept_id
GROUP BY d.dept_name;

-- Total incentives per employee
SELECT e.emp_id, e.emp_name, COALESCE(SUM(i.incentive_amount), 0) AS Total_Incentive
FROM Employee e
LEFT JOIN Incentive i ON e.emp_id = i.emp_id
GROUP BY e.emp_id, e.emp_name;

-- Employees working on Alpha Project (by dept)
SELECT e.emp_id, e.emp_name, p.project_name
FROM Employee e
```

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

project_name	Headcount
Recruitment	2
Audit	2
AI Research	2
Alpha Project	2


Limit to 1000 rows
154 LEFT JOIN Employee e ON p.dept_id = e.dept_id
155 GROUP BY p.project_name;
156
157 -- Department-wise average & max salary
158 SELECT d.dept_name, AVG(e.salary) AS Avg_Salary, MAX(e.salary) AS Max_Salary
159 FROM Department d
160 LEFT JOIN Employee e ON d.dept_id = e.dept_id
161 GROUP BY d.dept_name;
162
163 -- Total incentives per employee
164 SELECT e.emp_id, e.emp_name, COALESCE(SUM(i.incentive_amount), 0) AS Total_Incentive
165 FROM Employee e
166 LEFT JOIN Incentive i ON e.emp_id = i.emp_id
167 GROUP BY e.emp_id, e.emp_name;
168
169 -- Employees working on Alpha Project (by dept)
170 SELECT e.emp_id, e.emp_name, p.project_name
171 FROM Employee e
172 JOIN Project p ON e.dept_id = p.dept_id
173 WHERE p.project_name = 'Alpha Project';
174
175 -- Departments with no employees
176 SELECT d.dept_id, d.dept_name
177 FROM Department d
Result Grid
Filter Rows:
Export:
Wrap Cell Content:
dept_name Avg_Salary Max_Salary
HR 75000.000000 90000.00
Finance 75000.000000 95000.00
R&D 81000.000000 97000.00

```sql
-- Total incentives per employee
SELECT e.emp_id, e.emp_name, COALESCE(SUM(i.incentive_amount), 0) AS Total_Incentive
FROM Employee e
LEFT JOIN Incentive i ON e.emp_id = i.emp_id
GROUP BY e.emp_id, e.emp_name;

-- Employees working on Alpha Project (by dept)
SELECT e.emp_id, e.emp_name, p.project_name
FROM Employee e
JOIN Project p ON e.dept_id = p.dept_id
WHERE p.project_name = 'Alpha Project';

-- Departments with no employees
SELECT d.dept_id, d.dept_name
FROM Department d
LEFT JOIN Employee e ON d.dept_id = e.dept_id
```

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

emp_id	emp_name	Total_Incentive
1	Ravi	0.00
2	Kiran	5000.00
3	Asha	3000.00
4	Ramesh	0.00
5	Divya	7000.00
6	Suman	0.00

```
164  SELECT e.emp_id, e.emp_name, COALESCE(SUM(i.incentive_amount), 0) AS Total_Incentive
165  FROM Employee e
166  LEFT JOIN Incentive i ON e.emp_id = i.emp_id
167  GROUP BY e.emp_id, e.emp_name;
168
169  -- Employees working on Alpha Project (by dept)
170  SELECT e.emp_id, e.emp_name, p.project_name
171  FROM Employee e
172  JOIN Project p ON e.dept_id = p.dept_id
173  WHERE p.project_name = 'Alpha Project';
174
175  -- Departments with no employees
176  SELECT d.dept_id, d.dept_name
177  FROM Department d
178  LEFT JOIN Employee e ON d.dept_id = e.dept_id
179  WHERE e.emp_id IS NULL;
180
181  -- Managers and their direct report counts
182  SELECT m.emp_id AS Manager_ID, m.emp_name AS Manager_Name, COUNT(e.emp_id) AS Direct_Reports
183  FROM Employee m
184  LEFT JOIN Employee e ON e.manager_id = m.emp_id
185  GROUP BY m.emp_id, m.emp_name;
186
187  -- Employees linked to departments with multiple projects
```

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

emp_id	emp_name	Total_Incentive
1	Ravi	0.00
2	Kiran	5000.00
3	Asha	3000.00
4	Ramesh	0.00
5	Divya	7000.00
6	Suman	0.00

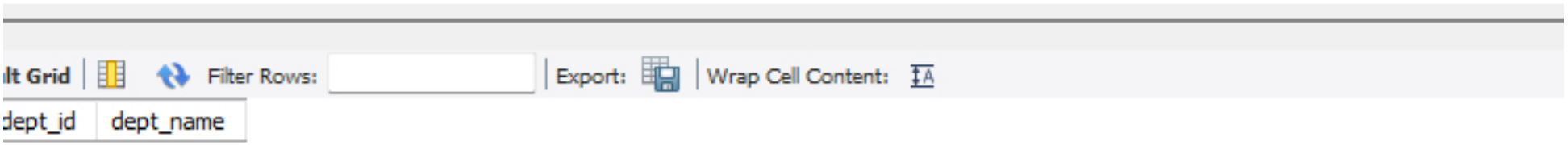
Result 66

```sql
-- Departments with no employees
SELECT d.dept_id, d.dept_name
FROM Department d
LEFT JOIN Employee e ON d.dept_id = e.dept_id
WHERE e.emp_id IS NULL;

-- Managers and their direct report counts
SELECT m.emp_id AS Manager_ID, m.emp_name AS Manager_Name, COUNT(e.emp_id) AS Direct_Reports
FROM Employee m
LEFT JOIN Employee e ON e.manager_id = m.emp_id
GROUP BY m.emp_id, m.emp_name;

-- Employees linked to departments with multiple projects
SELECT e.emp_id, e.emp_name, COUNT(p.project_id) AS Project_Count
FROM Employee e
JOIN Project p ON e.dept_id = p.dept_id
GROUP BY e.emp_id, e.emp_name
HAVING COUNT(p.project_id) > 1;
```

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

	dept_id	dept_name

```sql
-- Managers and their direct report counts
SELECT m.emp_id AS Manager_ID, m.emp_name AS Manager_Name, COUNT(e.emp_id) AS Direct_Reports
FROM Employee m
LEFT JOIN Employee e ON e.manager_id = m.emp_id
GROUP BY m.emp_id, m.emp_name;

-- Employees linked to departments with multiple projects
SELECT e.emp_id, e.emp_name, COUNT(p.project_id) AS Project_Count
FROM Employee e
JOIN Project p ON e.dept_id = p.dept_id
GROUP BY e.emp_id, e.emp_name
HAVING COUNT(p.project_id) > 1;

-- ============================================================
-- ☑ PROGRAM 7: SUPPLIER DATABASE
-- ============================================================

CREATE TABLE Supplier (
    sid INT PRIMARY KEY,
    sname VARCHAR(50)
);
```



```sql
-- Employees linked to departments with multiple projects
SELECT e.emp_id, e.emp_name, COUNT(p.project_id) AS Project_Count
FROM Employee e
JOIN Project p ON e.dept_id = p.dept_id
GROUP BY e.emp_id, e.emp_name
HAVING COUNT(p.project_id) > 1;

-- ============================================================
-- ☑ PROGRAM 7: SUPPLIER DATABASE
-- ============================================================

CREATE TABLE Supplier (
    sid INT PRIMARY KEY,
    sname VARCHAR(50)
);
```

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

emp_id	emp_name	Project_Count
1	Ravi	2
2	Kiran	2