Task Completion Report

Query 1: How many employees does each manager manage?

```
SELECT
  m.manager_id,
  m.manager_name,
  COUNT(e.employee_id) AS total_employees_managed
FROM
  managers m
  LEFT JOIN employees e ON m.manager_id = e.manager_id
GROUP BY
  m.manager_id,
  m.manager_name
ORDER BY
  total_employees_managed DESC;
```

Let's break down the query step by step:

SELECT clause:

m.manager_id: This selects the manager_id column from the managers table, which is aliased as m. This column will be included in the output.

m.manager_name: This selects the manager_name column from the managers table. This column will be included in the output.

COUNT(e.employee_id) AS total_employees_managed: This counts the number of rows for each manager_id group and assigns the result to a column alias named total_employees_managed. The COUNT aggregation function counts the number of non-NULL values in the employee_id column.

FROM clause:

managers m: This specifies the table to query, which is the managers table. The alias m is used to refer to the table in the rest of the query.

LEFT JOIN employees e ON m.manager_id = e.manager_id: This joins the managers table with the employees table on the condition that the manager_id column in both tables matches. The LEFT JOIN keyword means that all rows from the managers table will be included in the results, even if there are no matching rows in the employees table.

GROUP BY clause:

m.manager_id, m.manager_name: This groups the results by both the manager_id and manager_name columns. The query will group all rows with the same manager_id and manager_name values together.

ORDER BY clause: total_employees_managed DESC: This sorts the results in descending order based on the total_employees_managed column. The DESC keyword specifies that the sorting should be in descending order (i.e., the highest count first).

Output:-

Manager_id	Manager_name	Total_employesss_managed
1	Rohit Sharma	0
2	Priya Singh	0
3	Anjali Verma	0
4	Sandeep Patel	0
5	Kavita Nair	0
6	Vikram Mehta	0
7	Neha Gupta	0
8	Amitabh Rao	0
9	Ritu Jain	0
10	Sunil Desai	0
11	Pooja Joshi	0
12	Rajesh Kumar	0
13	Deepika Rao	0
14	Vivek Kapoor	0
15	Meena Iyer	0
16	Arjun Das	0
17	Smita Roy	0
18	Karan Thakur	0
19	Rekha Shukla	0
20	Manoj Agarwal	0

Query 2: How many employees are there in each job title?

```
SELECT
  job_id,
  COUNT(employee_id) AS total_employees_in_job
FROM
  employee
GROUP BY
  job_id
ORDER BY
  total_employees_in_job DESC;
```

SELECT clause:

e.job_id: This selects the job_id column from the employees table, which is aliased as e. This column will be included in the output.

COUNT(e.employee_id) AS total_employees_in_job: This counts the number of rows for each job_id group and assigns the result to a column alias named total_employees_in_job. The COUNT aggregation function counts the number of non-NULL values in the employee_id column.

FROM clause:

employees e: This specifies the table to query, which is the employees table. The alias e is used to refer to the table in the rest of the query.

GROUP BY clause:

e.job_id: This groups the results by the job_id column. The query will group all rows with the same job_id value together.

ORDER BY clause:

total_employees_in_job DESC: This sorts the results in descending order based on the total_employees_in_job column. The DESC keyword specifies that the sorting should be in descending order (i.e., the highest count first)