Solution to Exercise 3

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WE'LL COVER THE FOLLOWING

Solution

```
SELECT PROJECT, COUNT(Emp_Id) AS Emp_Count
FROM SALARY
GROUP BY PROJECT
ORDER BY Emp_Count DESC;
```

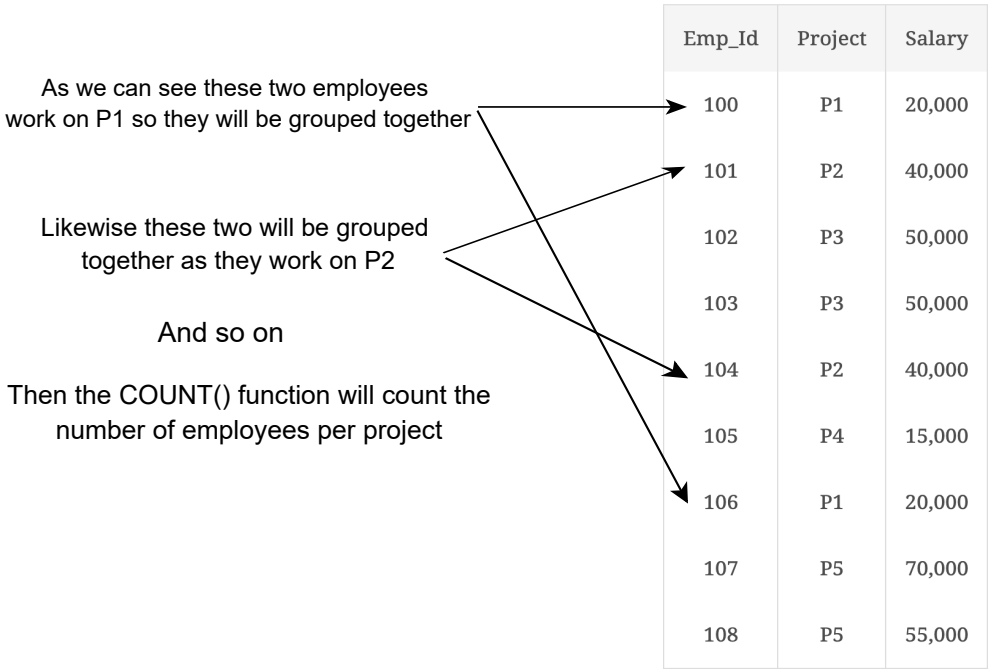
Again, the solution will work without using the alias for `COUNT(Emp_Id)`.

Explanation

The query has two requirements: first, fetch the project-wise count and then sort the result by that count. For a project-wise count, we will be using the COUNT() function to count the number of employees that have been grouped together using the GROUP BY clause. Lastly, for sorting, we will use the ORDER BY clause on the alias of the employee-count.

The slides below help to visualize the solution:

The GROUP BY clause will divide the employees working on same project into different groups.



Emp_Id	Project	Salary
100	P1	20,000
101	P2	40,000
102	P3	50,000
103	P3	50,000
104	P2	40,000
105	P4	15,000
106	P1	20,000
107	P5	70,000
108	P5	55,000

Then the ORDER BY clause will arrange the records in terms of the number of employees working on a project in descending order

PROJECT	Emp_Count
P1	2
P2	2
P3	2
P5	2
P4	1