

SQL PROBLEM STATEMENT & SOLUTION | INTERNSHIP ELEVATE LABS

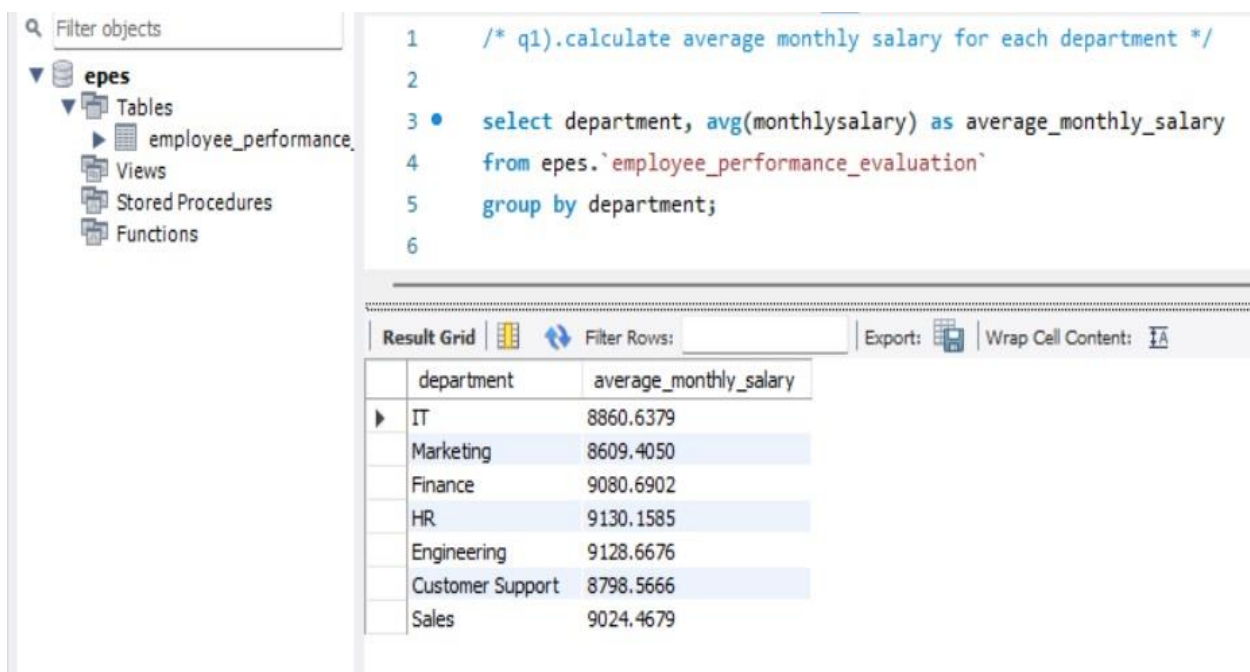
WEEK(1)

Q1) Calculate the average monthly salary for each department

Ans:- **SELECT** DEPARTMENT,AVG(MONTHLYSALARY) **AS**
AVERAGE_MONTHLY_SALARY
FROM EPES.`EMPLOYEE_PERFORMANCE_EVALUATION`
GROUP BY DEPARTMENT;

Explanation :-

- Here select department column from the table
- And along with avg(monthlysalary) get from the employee table
- AS keyword used for alternate name by our convenient
- We need all department thats why we used keyword as GROUP BY



The screenshot displays a SQL query execution interface. On the left, a sidebar shows the database structure with 'epes' as the selected database, containing 'Tables', 'Views', 'Stored Procedures', and 'Functions'. The 'Tables' section is expanded, showing 'employee_performance_evaluation'. The main area shows the following SQL query:

```
1  /* q1).calculate average monthly salary for each department */
2
3  •  select department, avg(monthlysalary) as average_monthly_salary
4     from epes.`employee_performance_evaluation`
5     group by department;
6
```

Below the query, the 'Result Grid' tab is active, showing the results of the query. The results are displayed in a table with two columns: 'department' and 'average_monthly_salary'.

department	average_monthly_salary
IT	8860.6379
Marketing	8609.4050
Finance	9080.6902
HR	9130.1585
Engineering	9128.6676
Customer Support	8798.5666
Sales	9024.4679

Q2) Identify the employee with the highest performance score in the IT department ?

Ans:- **SELECT** NAME, DEPARTMENT, PERFORMANCESCORE
FROM EPES.`EMPLOYEE_PERFORMANCE_EVALUATION`
WHERE DEPARTMENT = 'IT'
ORDER BY PERFORMANCESCORE DESC ;

Explanation :-

- Identify the highest performance score
- Select name column , department column and performancescore column from employee table
- We need IT dept details only thats why we used to **WHERE** clause this is condition
- We need highest score thats why we will use **ORDER BY** clause this is ascending order or descending order it will come

The screenshot displays a database management interface. On the left, a tree view shows the 'epes' database with tables, views, stored procedures, and functions. The main area shows a SQL query in a text editor:

```
1  /* Q2 IDENTIFY THE EMPLOYEE WITH THE HIGHEST PERFOTMANCE SCORE IN THE IT DEPARTMENT */
2
3  •  select name,department,performancescore from epes.`employee_performance_evaluation`
4     where department = 'it'
5     order by performancescore desc;
```

Below the query, the 'Result Grid' shows the output of the query. The table has three columns: 'name', 'department', and 'performancescore'. The results are sorted by 'performancescore' in descending order.

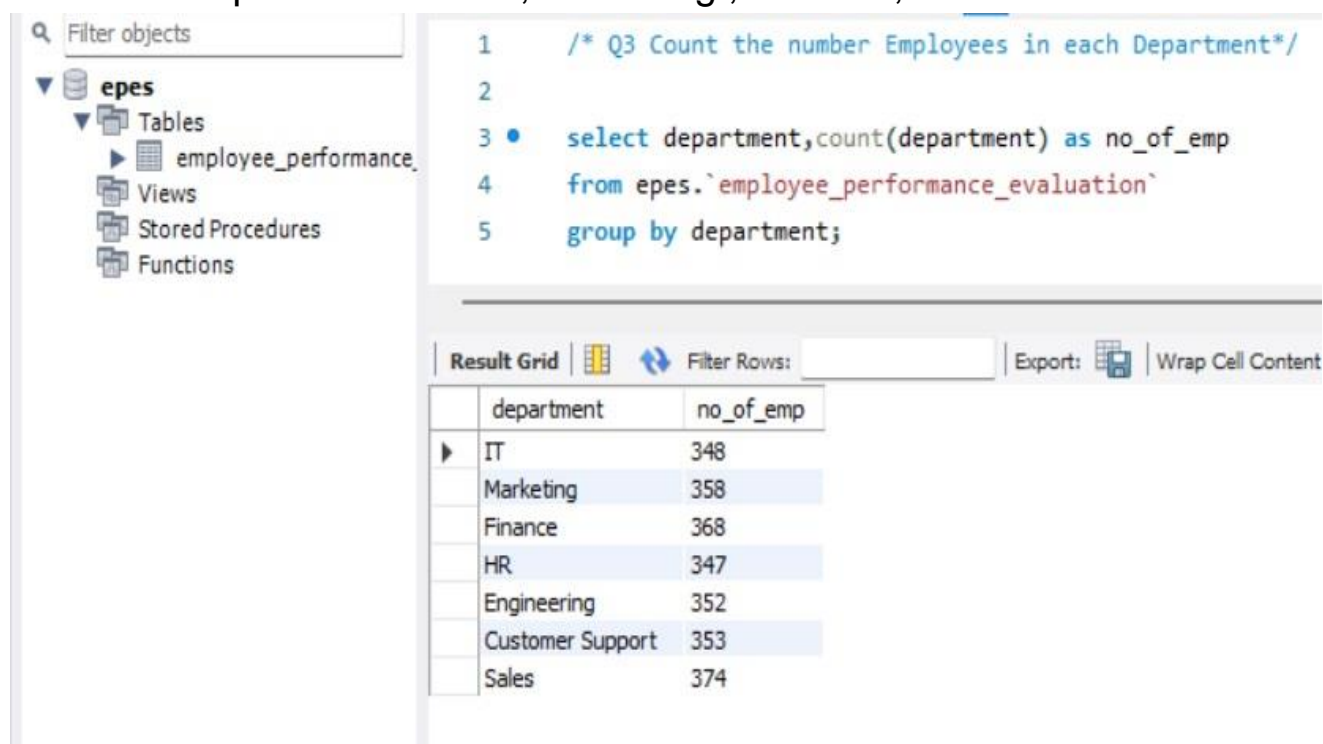
name	department	performancescore
Darryl Acosta	IT	99
Richard Reyes	IT	99
April Finley	IT	99
Richard Medina	IT	99
Laurie Sanchez	IT	98
Rebecca Kelly	IT	98
Margaret Orr	IT	98
Evelyn Galvan	IT	97
Lance Simmons	IT	97
Tyler Harris	IT	97
Gina Moore	IT	96
Michelle Evans	IT	96
Katherine Salas	IT	96
Robin Santiago	IT	96
Kimberly Sharp	IT	96
Kelly Johnson	IT	96

Q3) Count the number of employees in each Department ?

Ans:- **SELECT** DEPARTMENT, COUNT(DEPARTMENT)
AS NO_OF_EMP
FROM EPES.`EMPLOYEE_PERFORMANCE_EVALUATION`
GROUP BY DEPARTMENT;

Explanation :-

- Here we have to calculate how many employees in each department
- First of all select department column we need department only
- Count the no.of employees in each department we can use
- COUNT() Function middle of the bracket put it on Department COUNT(Department)
- AS Command used for alternate the name column name
- GROUP BY Statement rows and column group together individual department like IT , Marketing , Finance, etc



The screenshot displays a SQL IDE interface. On the left, a tree view shows the database structure with 'epes' as the selected database, containing 'Tables', 'Views', 'Stored Procedures', and 'Functions'. The 'employee_performance_evaluation' table is highlighted under 'Tables'. The main editor shows the following SQL query:

```
1  /* Q3 Count the number Employees in each Department*/  
2  
3  •  select department,count(department) as no_of_emp  
4     from epes.`employee_performance_evaluation`  
5     group by department;
```

Below the query editor, the 'Result Grid' tab is active, showing the results of the query. The grid has two columns: 'department' and 'no_of_emp'. The results are as follows:

department	no_of_emp
IT	348
Marketing	358
Finance	368
HR	347
Engineering	352
Customer Support	353
Sales	374

Q4) Find the employee who has been with the company the longest

Ans:- **SELECT** NAME, **FLOOR**(**DATEDIFF**(**CURRENT_DATE**,
HIREDATE)/365) **AS** LONGEST_YEARS
FROM EPES.`EMPLOYEE_PERFORMANCE_EVALUATION`
ORDER BY HIRDEDATE ASC;

Explanation :-

- We have to calculate longest period who has stayed in the company
- Select name of the column and we need dates thats why we display the hiredate also
- In hiredate DATEDIFF() Function is used for compare two dates
- That is current date and hirmedate
- FLOOR() Function is used for largest number to smallest number
- These all the select and get from the employee table details
- Then Finally we need Order Wise thats why used ORDER BY Cluase using Hiredate Column with Ascending Order

The screenshot shows a database management interface. On the left, a tree view displays the database structure under 'epes', including 'Tables', 'Views', 'Stored Procedures', and 'Functions'. The 'employee_performance_evaluation' table is selected. The main area shows a SQL query:

```

1  /*Q4 Find the employee who has been with the company the longest */
2
3  •  select name,floor(datediff(current_date, hiredate)/365) as longest_years
4     from epes.`employee_performance_evaluation`
5     order by hiredate asc;

```

Below the query, the 'Result Grid' displays the results of the query. The table has two columns: 'name' and 'longest_years'. The results are sorted by hiredate in ascending order.

name	longest_years
Anthony Randolph	30
Jessica Haas	30
Shari Ray	30
Brian Mendoza	30
Maria Fisher	30
Casey Wilkins	30
Dawn Nixon	29
Caroline Morales	29
Laura King	29
Mr. Jeffrey Horton	29
George Ochoa	29
Michael Williams	29
Angelica Parker	29
Michael Lyons	29
Bradley Duncan	29
Gregory Chambers	29
Brandv Forbes	29

At the bottom, there are tabs for 'Administration' and 'Schemas', and a status bar indicating 'No object selected'.

