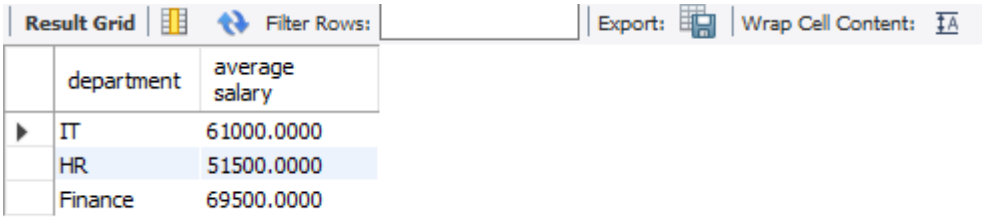
# MYSQL ASSIGNMENT 3

| emp_id | first_name | last_name | department | salary | hire_date |
|---|---|---|---|---|---|
| 1 | John | Doe | IT | 60000.00 | 2019-01-10 |
| 2 | Jane | Smith | HR | 55000.00 | 2018-03-05 |
| 3 | Emily | Jones | IT | 62000.00 | 2020-07-23 |
| 4 | Michael | Brown | Finance | 70000.00 | 2016-05-14 |
| 5 | Sarah | Davis | Finance | 69000.00 | 2017-11-18 |
| 6 | David | Johnson | HR | 48000.00 | 2021-09-10 |

1. Find the average salary of employees in each department.
   select department,avg(salary) as "average salary" from emp_details group by department;
   **select department,avg(salary) as "average salary" from emp_details group by department**;




| department | average salary |
|---|---|
| IT | 61000.0000 |
| HR | 51500.0000 |
| Finance | 69500.0000 |

2. Find the total number of employees hired after 2019.
   **select count(*) from emp_details where hire_date > "2019-12-31";**


| count(*) |
|---|
| 2 |

3. List the departments and the total salary of all employees in each department, ordered by the total salary.
   **select department, sum(salary) as "total salary" from emp_details group by department order by "total salary";**


| department | total salary |
|---|---|
| IT | 122000 |
| HR | 103000 |
| Finance | 139000 |

4. Find the highest salary in the Finance department.

**select salary from emp_details where department="Finance" order by salary desc limit 1;**

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

| salary |
|---|
| 70000 |

5. Get the top 3 highest-paid employees.

**select * from emp_details order by salary desc limit 3;**

Result Grid | Filter Rows: | Edit:

| emp_id | first_name | last_name | department | salary | hire_date |
|---|---|---|---|---|---|
| 4 | Michael | Brown | Finance | 70000 | 2016-05-14 |
| 5 | Sarah | Davis | Finance | 69000 | 2017-11-18 |
| 3 | Emily | Jones | IT | 62000 | 2020-07-23 |
| NULL | NULL | NULL | NULL | NULL | NULL |

6. Find the department with the minimum average salary.
**select department, avg(salary) as average_salary from emp_details group by department order by average_salary asc limit 1;**

Result Grid | Filter Rows:

| department | average_salary |
|---|---|
| HR | 51500.0000 |

7. Display the total number of employees in each department, ordered by the number of employees.
**select department, count(emp_id) as "number of employees" from emp_details group by department order by "number of employees";**
**select department, count(*) as "number of employees" from emp_details group by department order by "number of employees";**

Result Grid | Filter Rows:

| department | number of employees |
|---|---|
| IT | 2 |
| HR | 2 |
| Finance | 2 |

8. Find the average salary of employees who were hired before 2020.

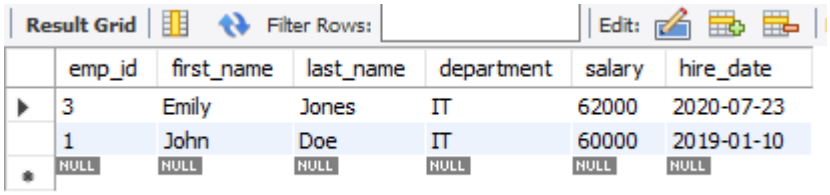
**select avg(salary) from emp_details where hire_date<"2020-01-01";**

Result Grid | Filter Rows:

| avg(salary) |
|---|
| 63500.0000 |

9. List the names of employees in the IT department ordered by hire date, with the most recently hired employees first.

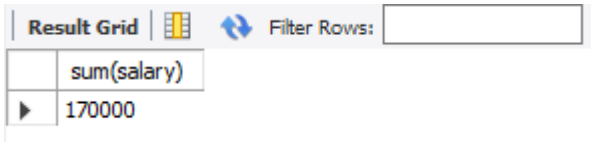
**select * from emp_details where department="IT" order by hire_date desc;**



| emp_id | first_name | last_name | department | salary | hire_date |
|---|---|---|---|---|---|
| 3 | Emily | Jones | IT | 62000 | 2020-07-23 |
| 1 | John | Doe | IT | 60000 | 2019-01-10 |
| NULL | NULL | NULL | NULL | NULL | NULL |

10. Find the sum of salaries for all employees hired after January 1, 2019, ordered by salary.

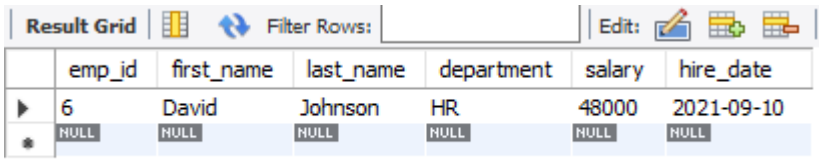
**select sum(salary) from emp_details where hire_date>"2019-01-01";**



| sum(salary) |
|---|
| 170000 |

11. Get the employee with the lowest salary in the HR department.

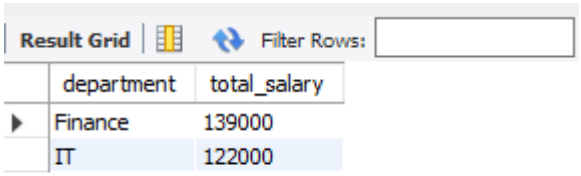
**select * from emp_details where department="HR" order by salary limit 1;**



| emp_id | first_name | last_name | department | salary | hire_date |
|---|---|---|---|---|---|
| 6 | David | Johnson | HR | 48000 | 2021-09-10 |
| NULL | NULL | NULL | NULL | NULL | NULL |

12. Find the total salary paid to employees in each department, but limit the result to the top 2 highest-paying departments.

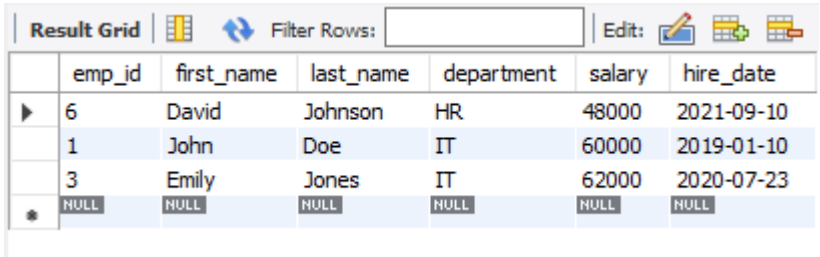
**select department ,sum(salary) as total_salary from emp_details group by department order by total_salary desc limit 2;**



| department | total_salary |
|---|---|
| Finance | 139000 |
| IT | 122000 |

13. List all employees hired after 2018, ordered by salary, and show only the first 4 employees.

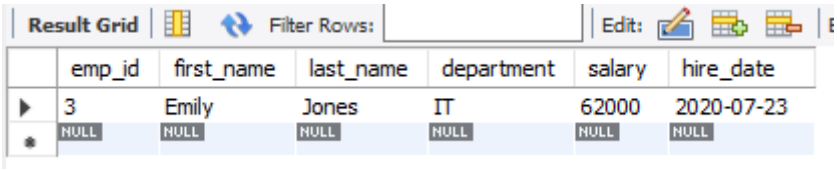
**select * from emp_details where hire_date > "2018-12-31" order by salary limit 4;**



| emp_id | first_name | last_name | department | salary | hire_date |
|---|---|---|---|---|---|
| 6 | David | Johnson | HR | 48000 | 2021-09-10 |
| 1 | John | Doe | IT | 60000 | 2019-01-10 |
| 3 | Emily | Jones | IT | 62000 | 2020-07-23 |
| NULL | NULL | NULL | NULL | NULL | NULL |

**14.** Find the highest salary in the IT department, but limit the results to the top 1 result.

**select * from emp_details where department="IT" order by salary desc limit 1;**

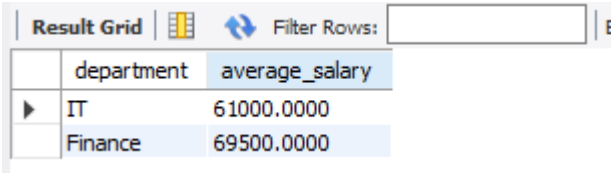


Result Grid | Filter Rows: | Edit:

| emp_id | first_name | last_name | department | salary | hire_date |
|---|---|---|---|---|---|
| 3 | Emily | Jones | IT | 62000 | 2020-07-23 |
| NULL | NULL | NULL | NULL | NULL | NULL |

**15.** Get the average salary of employees in each department and list only departments with an average salary greater than $60,000.

**select department, avg(salary) as average_salary from emp_details group by department having average_salary>60000.00;**



Result Grid | Filter Rows:

| department | average_salary |
|---|---|
| IT | 61000.0000 |
| Finance | 69500.0000 |