Assignmnet_6 [SUBQUERIES]

create database office2;

use office2;

create table employees (emp_id int, name varchar(50), department varchar(50), salary int);

insert into employees (emp_id, name, department, salary) values (1,"John","HR",5000),(2,"Alice","IT",7000),(3,"Bob","Finance",6000),

(4,"Eve","IT",8000),(5,"Charlie","Finance",7500);

create table departments(dept_id int, dept_name varchar (50));

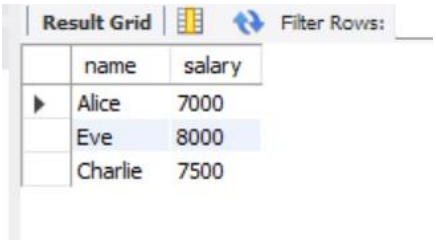
insert into departments(dept_id,dept_name) values (1,"HR"),(2,"IT"),(3,"Finance");

1. Find employees with salaries greater than the average salary of all employees.

select name, salary

from employees

where salary>(select avg(salary) from employees);

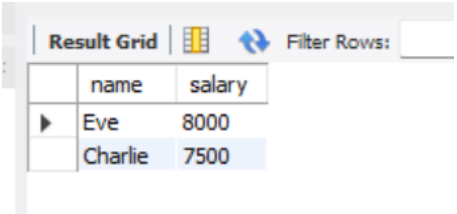


2. Find employees whose salary is higher than the salary of 'Alice'.

select name, salary

from employees

where salary>(select salary from employees where name = 'Alice');

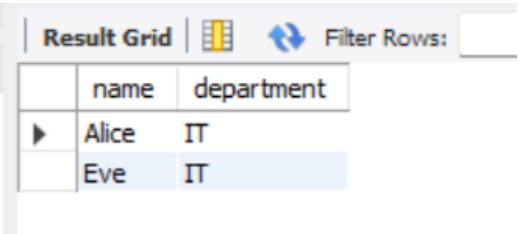


3. List employees who belong to a department that has the name 'IT'.

select name , department

from employees

where department="IT";

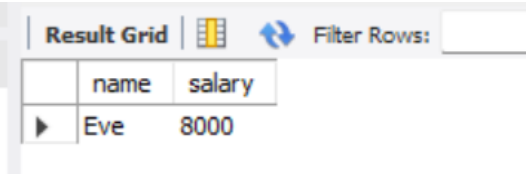


4. Get the names of employees who earn the highest salary in their department.

select name , salary

from employees

having salary=(select max(salary)from employees);

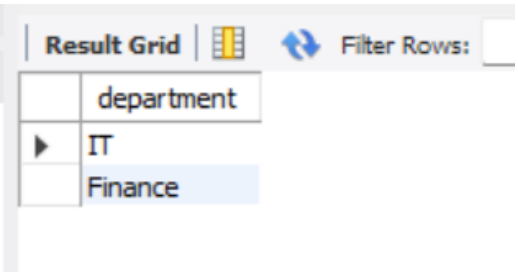


5. Retrieve the departments where at least one employee earns more than 7000.

select department

from employees

where salary>7000;

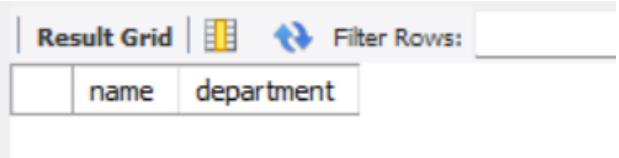


6. List employees who do not belong to any department in the departments table.

select name , department

from employees

where department=null;

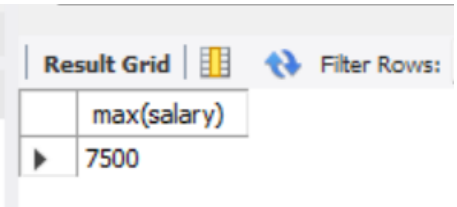


7. Find the second-highest salary among employees.

select max(salary)

from employees

where salary<(select max(salary) from employees);

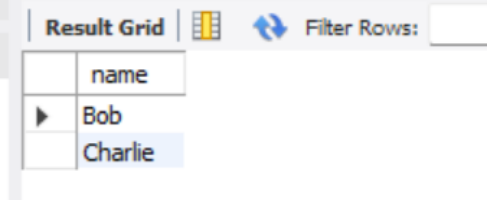


8. Retrieve the names of employees who work in the department with the highest number of employees.

select name

from employees

where department = (select department from employees group by department order by count(emp_id) desc limit 1);

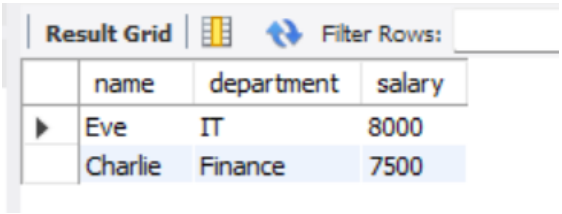


9. Find employees who earn more than the average salary in their department.

select name,department,salary

from employees e1

where salary > (select avg(salary) from employees e2 where e1.department = e2.department);



	name	department	salary
▶	Eve	IT	8000
	Charlie	Finance	7500

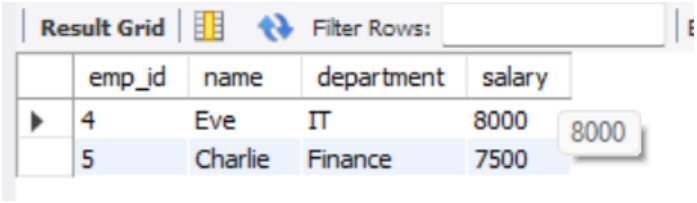
10. Retrieve employees whose salary is above 7000 and belong to departments in the departments table.

select *

from employees e

where e.salary > 7000

and e.emp_id in (select emp_id from departments);



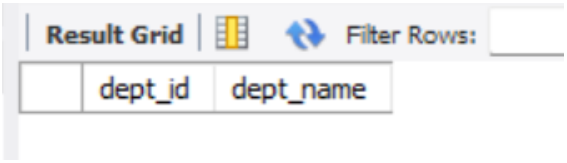
	emp_id	name	department	salary
▶	4	Eve	IT	8000
	5	Charlie	Finance	7500

11. List all departments that have no employees.

select dept_id, dept_name

from departments

where dept_id not in (select distinct emp_id from employees);



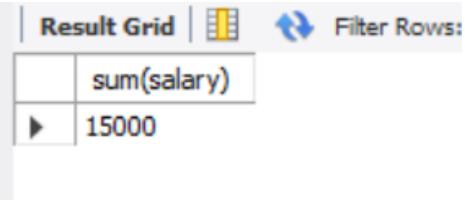
	dept_id	dept_name

13. Get the total salary of the department with the maximum total salary.

select sum(salary)

from employees

where department = (select department from employees group by department order by sum(salary) desc limit 1);

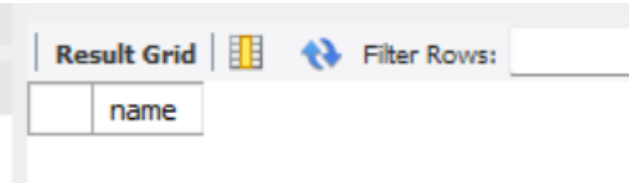


14. Retrieve employees whose department has more than two employees.

select name

from employees

where department = (select department from employees group by department having count(emp_id)>2);



15. Find employees whose salary is higher than the average salary of employees in the IT department.

select name

from employees

where salary > (select avg(salary) from employees where department = "IT");