

## 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));**

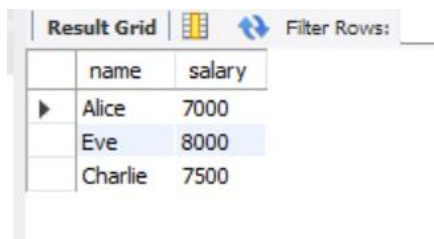
**insert into departments(dept\_id,dept\_name) values  
(1,"HR"),(2,"IT"),(3,"Finance");**

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);**



	name	salary
▶	Alice	7000
	Eve	8000
	Charlie	7500

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');**

Result Grid			Filter Rows:
	name	salary	
▶	Eve	8000	
	Charlie	7500	

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

```
select name , department  
from employees  
where department="IT";
```

Result Grid			Filter Rows:
	name	department	
▶	Alice	IT	
	Eve	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);
```

Result Grid			Filter Rows:
	name	salary	
▶	Eve	8000	

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

```
select department  
from employees  
where salary>7000;
```

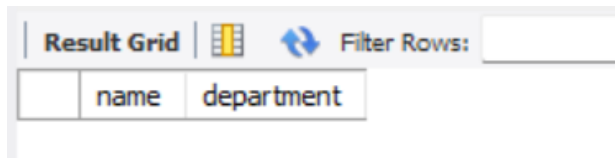
Result Grid		Filter Rows:
	department	
▶	IT	
	Finance	

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

```
select name , department
```

```
from employees
```

```
where department=null;
```



The screenshot shows a database interface with a 'Result Grid' tab. The grid has two columns: 'name' and 'department'. The 'Filter Rows' button is visible to the right of the grid.

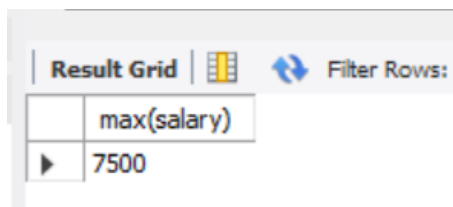
	name	department
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7. Find the second-highest salary among employees.

```
select max(salary)
```

```
from employees
```

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



The screenshot shows a database interface with a 'Result Grid' tab. The grid has one column: 'max(salary)'. The value '7500' is displayed in the first row.

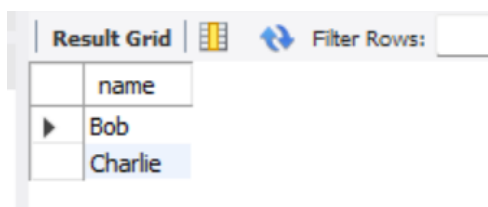
max(salary)
7500

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);
```



The screenshot shows a database interface with a 'Result Grid' tab. The grid has one column: 'name'. The values 'Bob' and 'Charlie' are displayed in the first two rows.

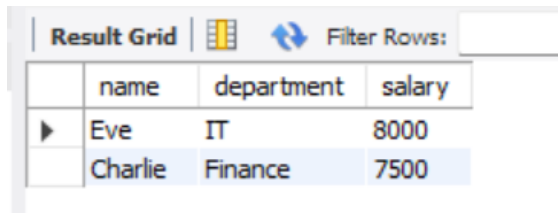
name
Bob
Charlie

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

```
select name,department,salary
```

```
from employees e1
```

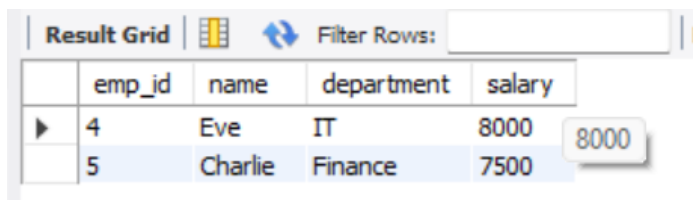
**where salary > (select avg(salary) from employees e2 where e1.department = e2.department);**



	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.

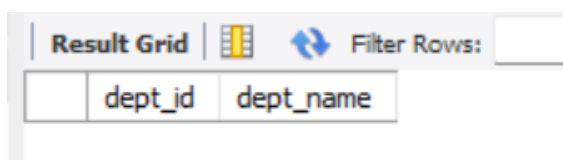
**select \***  
**from employees e**  
**where e.salary > 7000**  
**and e.emp\_id in (select emp\_id from departments);**



	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
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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);**

Result Grid	Filter Rows:
sum(salary)	
15000	

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);**

Result Grid	Filter Rows:
name	

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");**

Result Grid	Filter Rows:
name	
Eve	