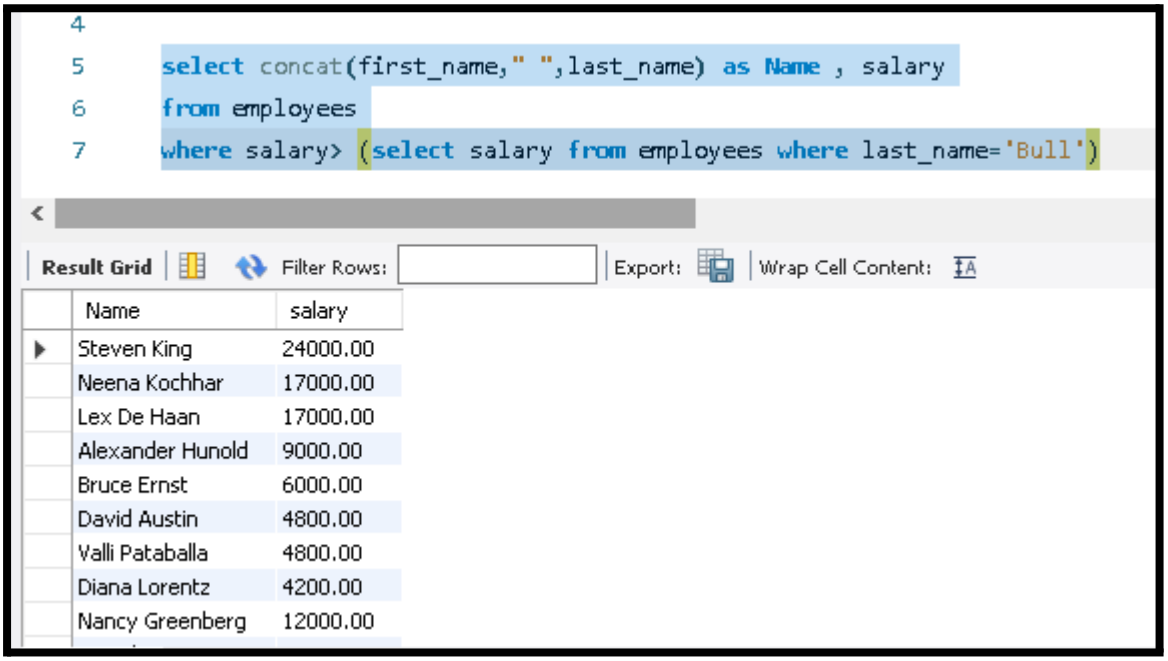
Subquery Question

1. Write a query to find the name (first_name, last_name) and the salary of the employees who have a higher salary than the employee whose last_name='Bull'.

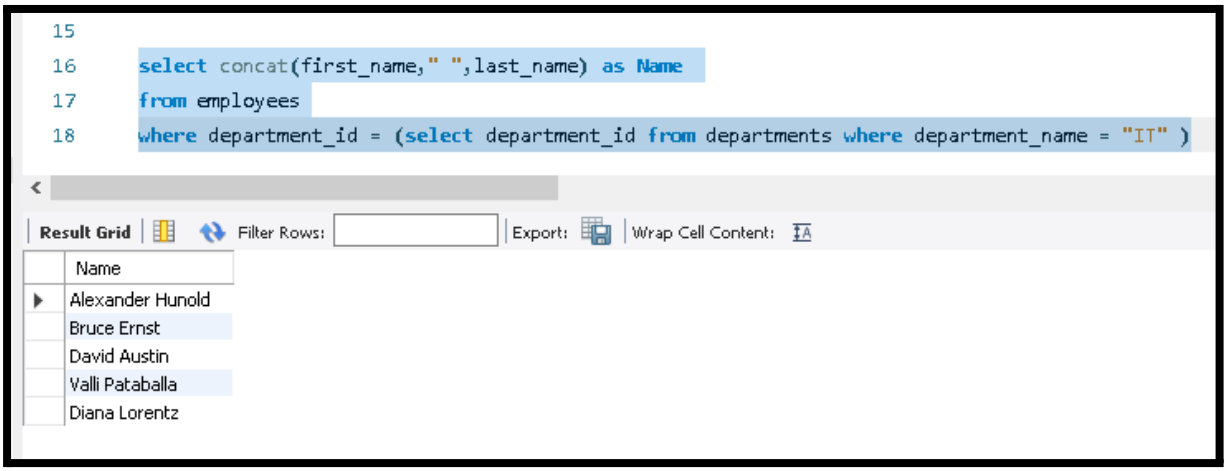
```
select concat(first_name," ",last_name) as Name , salary
from employees
where salary> (select salary from employees where last_name='Bull')
```



Name	salary
Steven King	24000.00
Neena Kochhar	17000.00
Lex De Haan	17000.00
Alexander Hunold	9000.00
Bruce Ernst	6000.00
David Austin	4800.00
Valli Pataballa	4800.00
Diana Lorentz	4200.00
Nancy Greenberg	12000.00

2. Write a query to find the name (first_name, last_name) of all employees who works in the IT department.

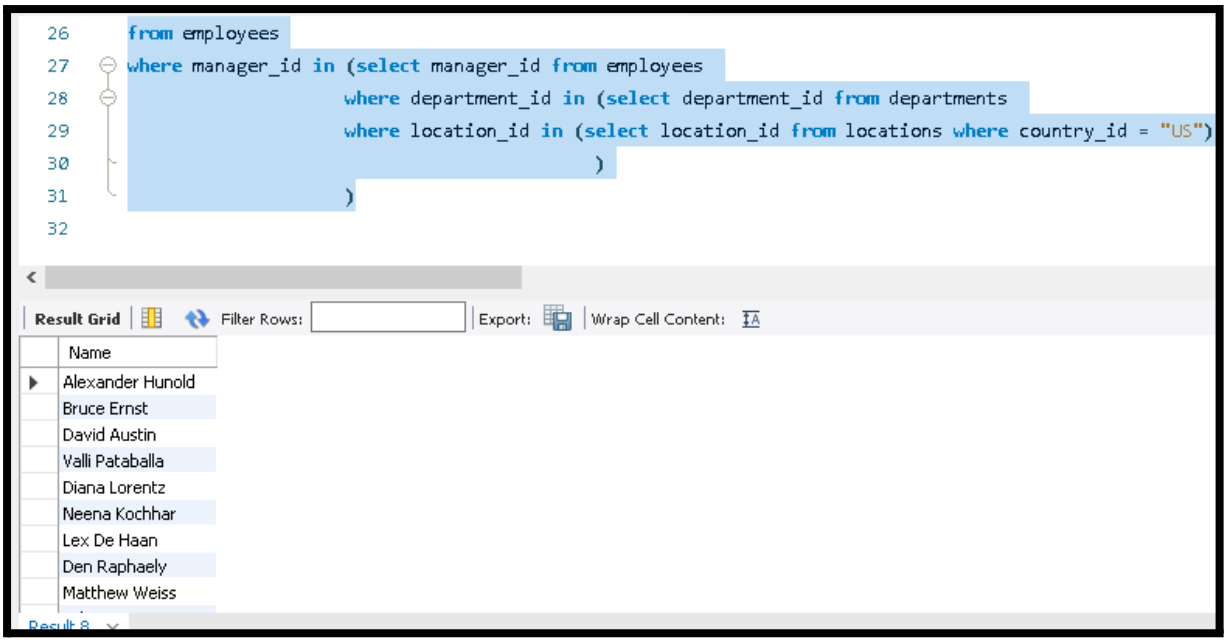
```
select concat(first_name," ",last_name) as Name
from employees
where department_id = (select department_id from departments where department_name =
"IT" )
```



Name
Alexander Hunold
Bruce Ernst
David Austin
Valli Pataballa
Diana Lorentz

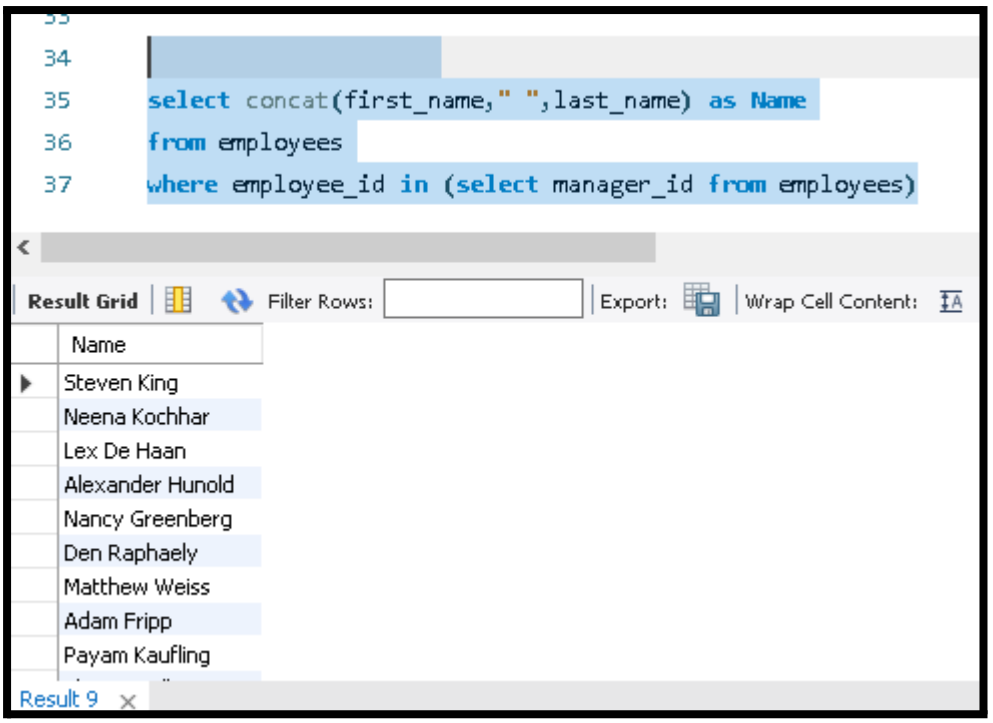
3. Write a query to find the name (first_name, last_name) of the employees who have a manager and worked in a USA based department.

```
SELECT first_name, last_name FROM employees
WHERE manager_id in (select employee_id
FROM employees WHERE department_id
IN (SELECT department_id FROM departments WHERE location_id
IN (select location_id from locations where country_id='US')));
```



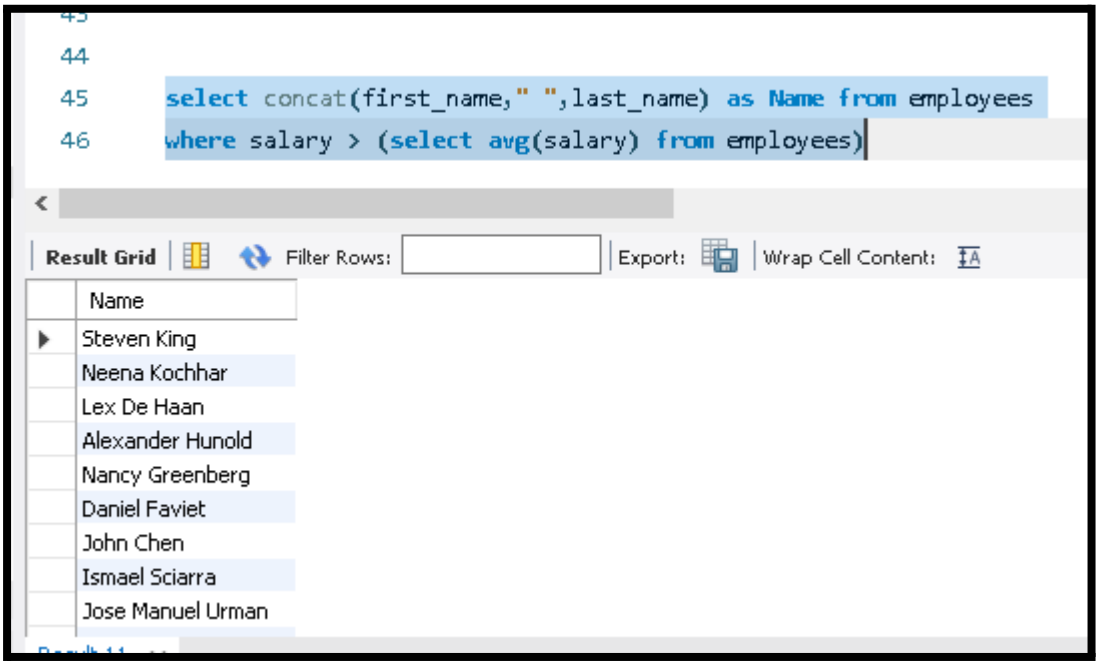
4. Write a query to find the name (first_name, last_name) of the employees who are managers.

```
select concat(first_name," ",last_name) as Name
from employees
where employee_id in (select manager_id from employees)
```



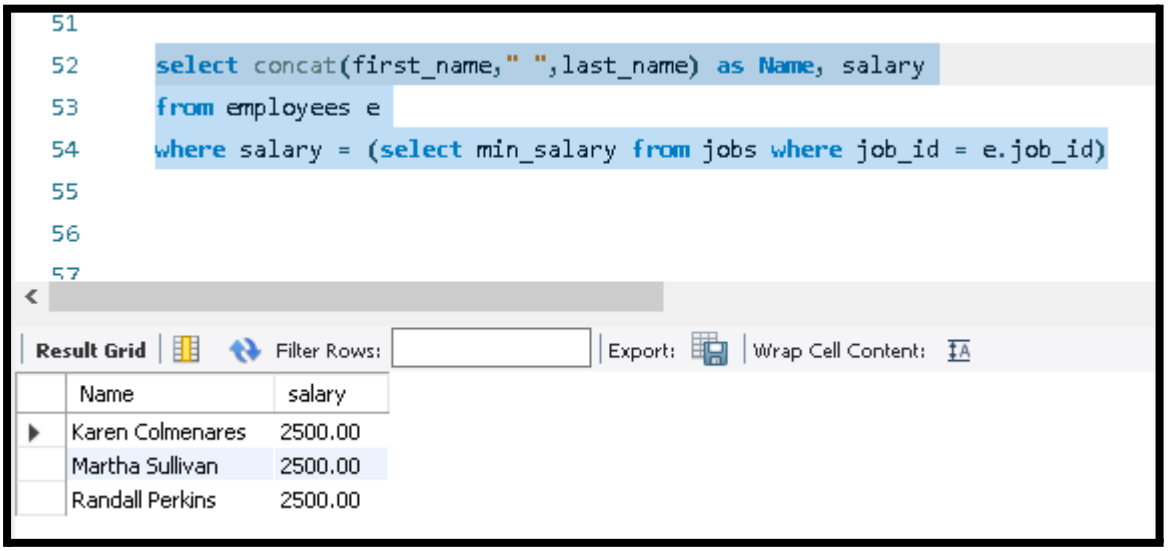
5. Write a query to find the name (first_name, last_name), and salary of the employees whose salary is greater than the average salary.

select concat(first_name," ",last_name) as Name from employees
where salary > (select avg(salary) from employees)



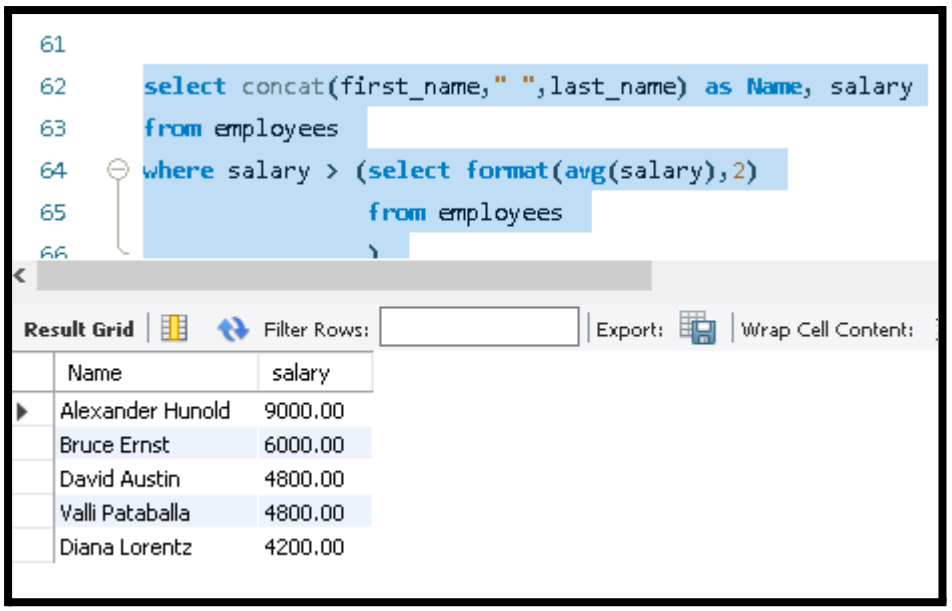
6. Write a query to find the name (first_name, last_name), and salary of the employees whose salary is equal to the minimum salary for their job grade.

```
select concat(first_name," ",last_name) as Name, salary
from employees e
where salary = (select min_salary from jobs where job_id = e.job_id)
```



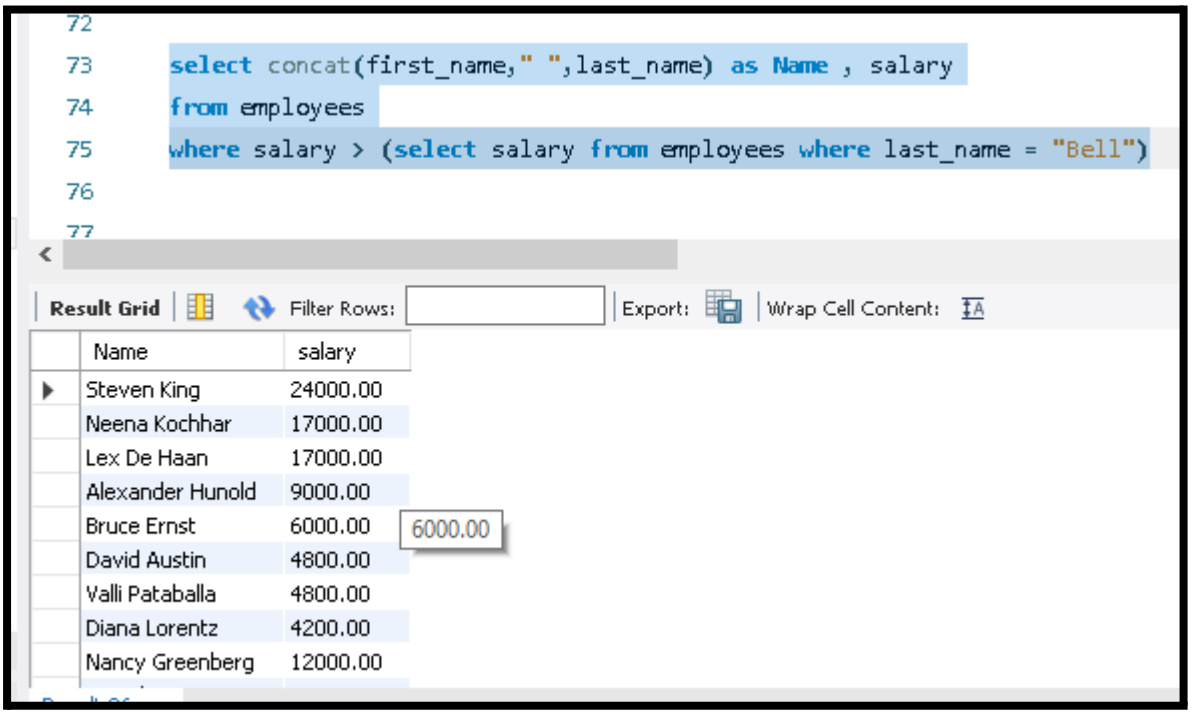
7. Write a query to find the name (first_name, last_name), and salary of the employees who earns more than the average salary and works in any of the IT departments.

```
select concat(first_name," ",last_name) as Name, salary
from employees
where salary > (select format(avg(salary),2)
                from employees
                )
    and job_id = 'IT_PROG'
```



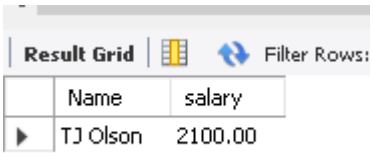
8. Write a query to find the name (first_name, last_name), and salary of the employees who earns more than the earning of Mr. Bell.

select concat(first_name," ",last_name) as Name , salary
from employees
where salary > (select salary from employees where last_name = "Bell")



9. Write a query to find the name (first_name, last_name), and salary of the employees who earn the same salary as the minimum salary for all departments.

```
select concat(first_name," ",last_name) as Name, salary
from employees e
where salary = (select min(salary) from employees)
```

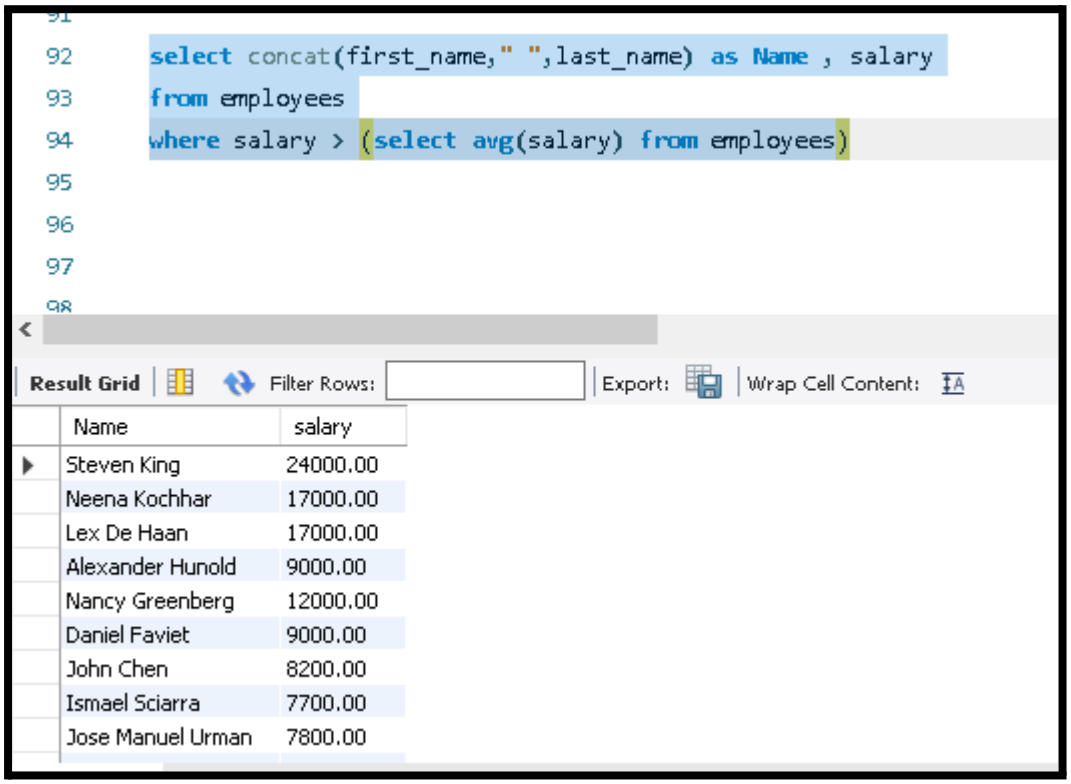


Result Grid | Filter Rows:

	Name	salary
▶	TJ Olson	2100.00

10. Write a query to find the name (first_name, last_name), and salary of the employees whose salary is greater than the average salary of all departments.

```
select concat(first_name," ",last_name) as Name , salary
from employees
where salary > (select avg(salary) from employees)
```



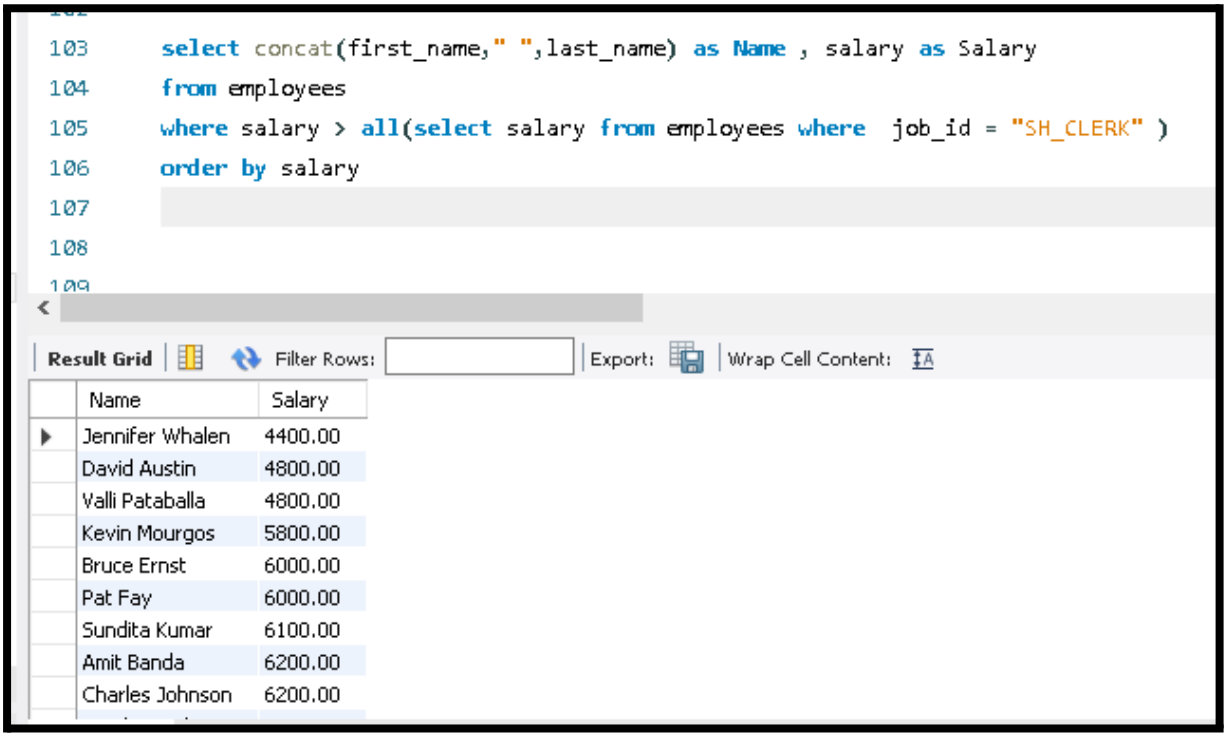
```
92  select concat(first_name," ",last_name) as Name , salary
93  from employees
94  where salary > (select avg(salary) from employees)
95
96
97
```

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

	Name	salary
▶	Steven King	24000.00
	Neena Kochhar	17000.00
	Lex De Haan	17000.00
	Alexander Hunold	9000.00
	Nancy Greenberg	12000.00
	Daniel Faviet	9000.00
	John Chen	8200.00
	Ismael Sciarra	7700.00
	Jose Manuel Urman	7800.00

11. Write a query to find the name (first_name, last_name) and salary of the employees who earn a salary that is higher than the salary of all the Shipping Clerk (JOB_ID = 'SH_CLERK'). Sort the results of the salary of the lowest to highest.

```
select concat(first_name," ",last_name) as Name , salary as Salary
from employees
where salary > all(select salary from employees where  job_id = "SH_CLERK" )
order by salary
```



12. Write a query to find the name (first_name, last_name) of the employees who are not supervisors.

```
select concat(first_name," ",last_name) as Name
from employees
where department_id != (select department_id from departments where department_name = "Executive")
```

```
112     select concat(first_name," ",last_name) as Name
113     from employees
114     where department_id != (select department_id from departments where department_name = "Executive")
115
116
```

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

Name
Alexander Hunold
Bruce Ernst
David Austin
Valli Pataballa
Diana Lorentz
Nancy Greenberg
Daniel Faviet
John Chen
Ismael Sciarra

Result 34

13. Write a query to display the employee ID, first name, last name, and department names of all employees.

select e.employee_id,concat(e.first_name," ",e.last_name) as Name,
(select department_name from departments d where d.department_id = e.department_id) as Department_Name
from employees e

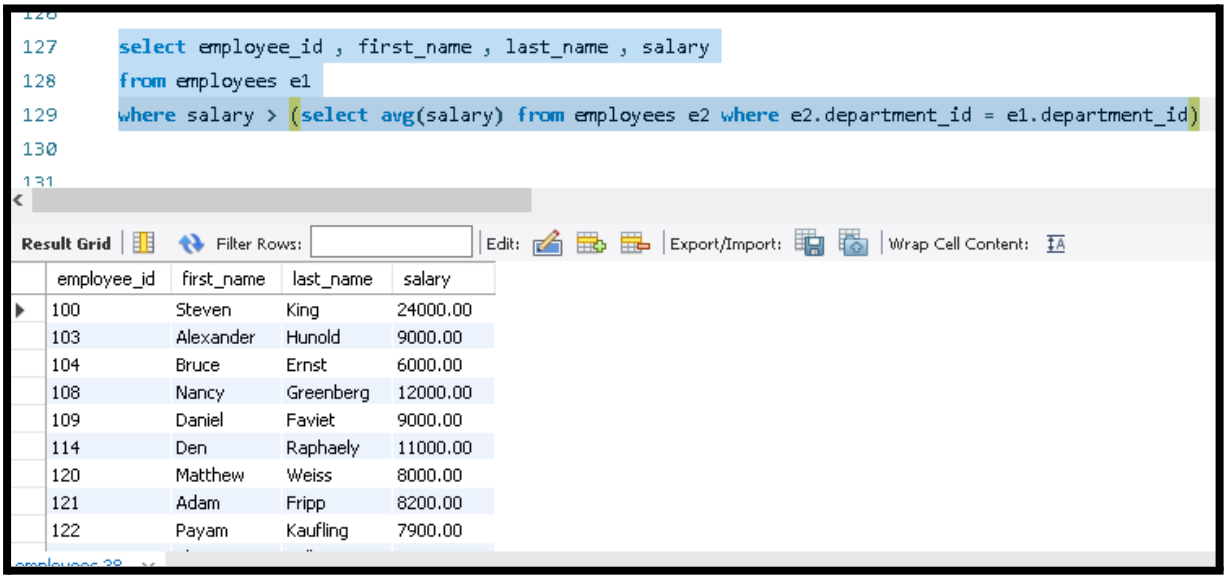
```
119
120     select e.employee_id,concat(e.first_name," ",e.last_name) as Name,
121     (select department_name from departments d where d.department_id = e.department_id) as Department_Name
122     from employees e
123
124
```

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

employee_id	Name	Department_Name
100	Steven King	Executive
101	Neena Kochhar	Executive
102	Lex De Haan	Executive
103	Alexander Hunold	IT
104	Bruce Ernst	IT
105	David Austin	IT
106	Valli Pataballa	IT
107	Diana Lorentz	IT
108	Nancy Greenberg	Finance

14. Write a query to display the employee ID, first name, last name, salary of all employees whose salary is above average for their departments.

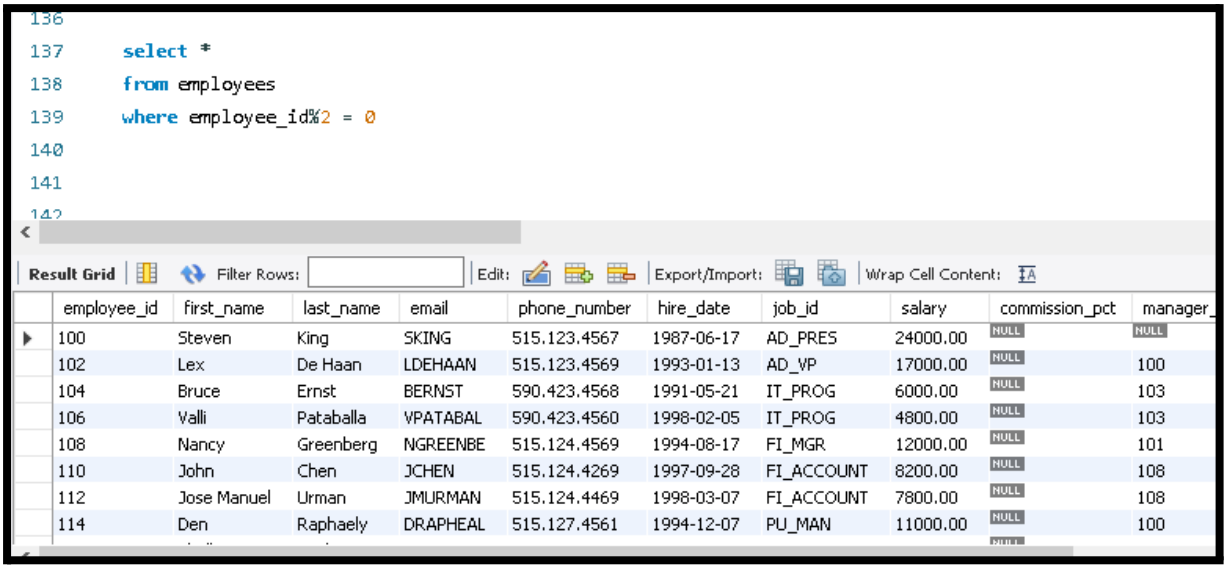
```
select employee_id , first_name , last_name , salary
from employees e1
where salary > (select avg(salary) from employees e2 where e2.department_id = e1.department_id)
```



employee_id	first_name	last_name	salary
100	Steven	King	24000.00
103	Alexander	Hunold	9000.00
104	Bruce	Ernst	6000.00
108	Nancy	Greenberg	12000.00
109	Daniel	Faviet	9000.00
114	Den	Raphaely	11000.00
120	Matthew	Weiss	8000.00
121	Adam	Fripp	8200.00
122	Payam	Kaufling	7900.00

15. Write a query to fetch even numbered records from employees table.

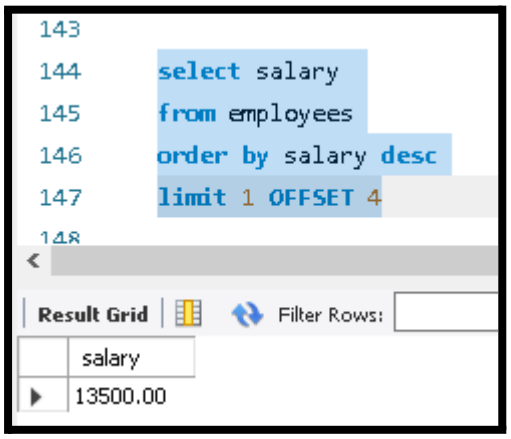
```
select *
from employees
where employee_id%2 = 0
```



employee_id	first_name	last_name	email	phone_number	hire_date	job_id	salary	commission_pct	manager_
100	Steven	King	SKING	515.123.4567	1987-06-17	AD_PRES	24000.00	NULL	NULL
102	Lex	De Haan	LDEHAAN	515.123.4569	1993-01-13	AD_VP	17000.00	NULL	100
104	Bruce	Ernst	BERNST	590.423.4568	1991-05-21	IT_PROG	6000.00	NULL	103
106	Valli	Pataballa	VPATABAL	590.423.4560	1998-02-05	IT_PROG	4800.00	NULL	103
108	Nancy	Greenberg	NGREENBE	515.124.4569	1994-08-17	FI_MGR	12000.00	NULL	101
110	John	Chen	JCHEN	515.124.4269	1997-09-28	FI_ACCOUNT	8200.00	NULL	108
112	Jose Manuel	Urman	JMURMAN	515.124.4469	1998-03-07	FI_ACCOUNT	7800.00	NULL	108
114	Den	Raphaely	DRAPHEAL	515.127.4561	1994-12-07	PU_MAN	11000.00	NULL	100

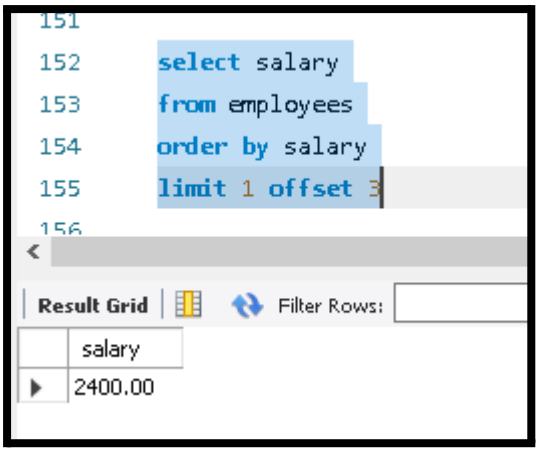
16. Write a query to find the 5th maximum salary in the employees table.

```
select salary
from employees
order by salary desc
limit 1 OFFSET 4
```



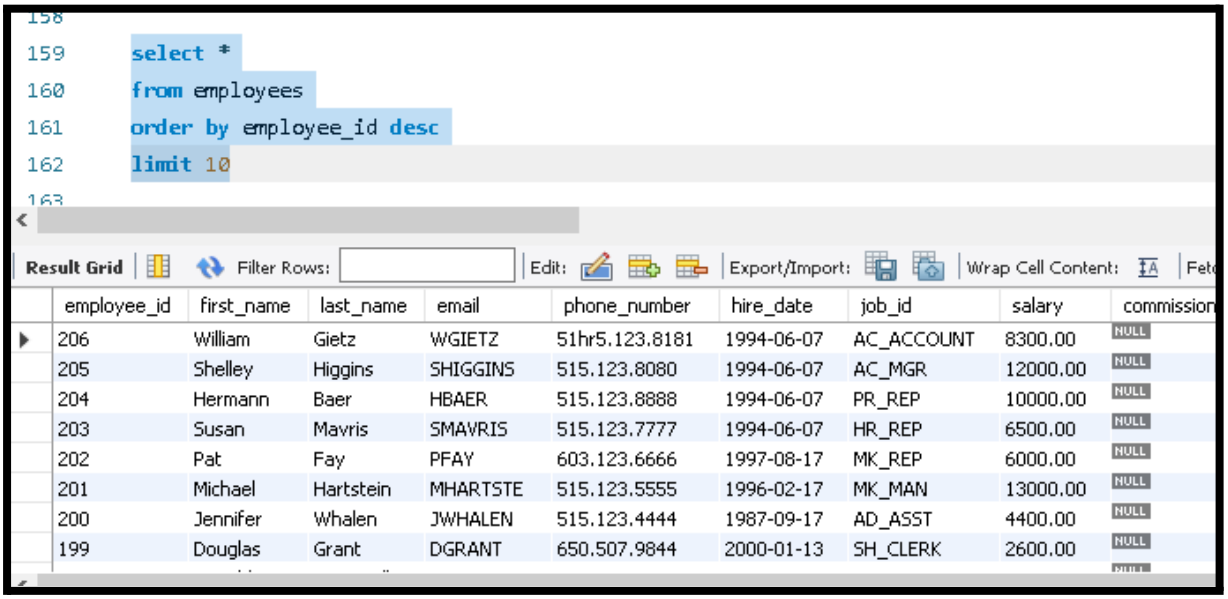
17. Write a query to find the 4th minimum salary in the employees table

```
select salary
from employees
order by salary
limit 1 offset 3
```



18. Write a query to select last 10 records from a table.

```
select *
from employees
order by employee_id desc
limit 10
```



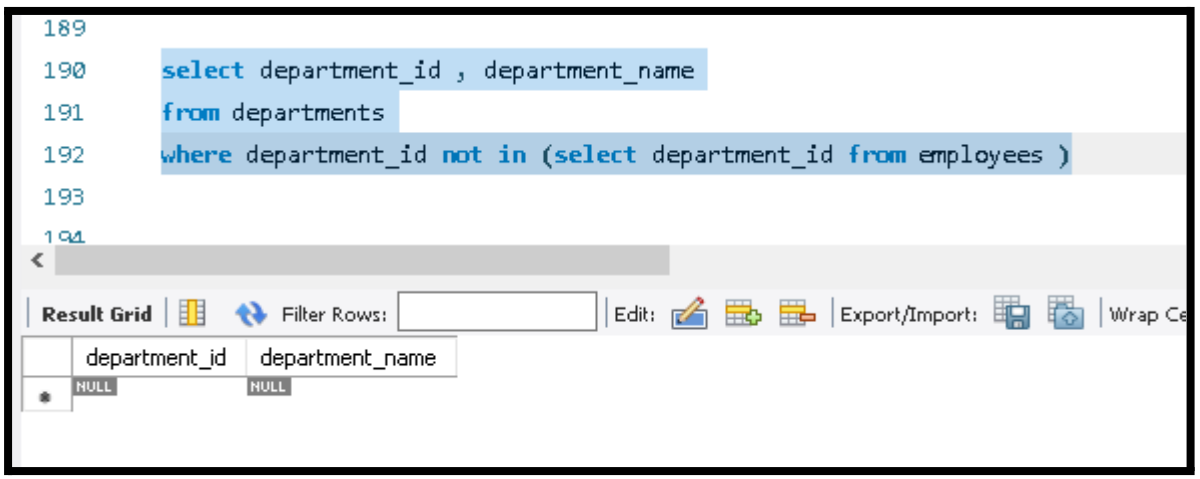
```
158
159     select *
160     from employees
161     order by employee_id desc
162     limit 10
163
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Cell Content:

employee_id	first_name	last_name	email	phone_number	hire_date	job_id	salary	commission
206	William	Gietz	WGIETZ	51hr5.123.8181	1994-06-07	AC_ACCOUNT	8300.00	NULL
205	Shelley	Higgins	SHIGGINS	515.123.8080	1994-06-07	AC_MGR	12000.00	NULL
204	Hermann	Baer	HBAER	515.123.8888	1994-06-07	PR_REP	10000.00	NULL
203	Susan	Mavris	SMAVRIS	515.123.7777	1994-06-07	HR_REP	6500.00	NULL
202	Pat	Fay	PFAY	603.123.6666	1997-08-17	MK_REP	6000.00	NULL
201	Michael	Hartstein	MHARTSTE	515.123.5555	1996-02-17	MK_MAN	13000.00	NULL
200	Jennifer	Whalen	JWHALEN	515.123.4444	1987-09-17	AD_ASST	4400.00	NULL
199	Douglas	Grant	DGRANT	650.507.9844	2000-01-13	SH_CLERK	2600.00	NULL

19. Write a query to list the department ID and name of all the departments where no employee is working.

```
select department_id , department_name
from departments
where department_id not in (select department_id from employees )
```



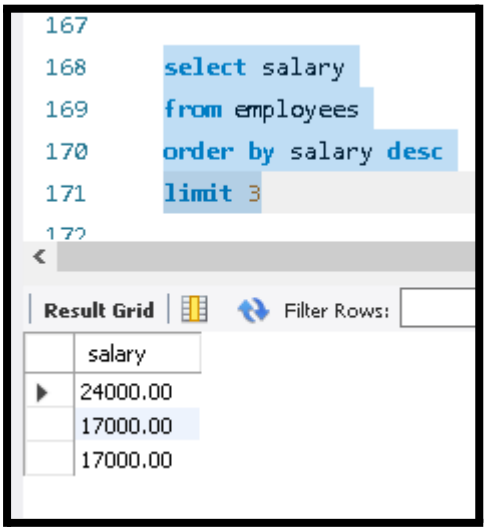
```
189
190     select department_id , department_name
191     from departments
192     where department_id not in (select department_id from employees )
193
```

Result Grid | Filter Rows: | Edit: | Export/Import: | Wrap Ce

department_id	department_name
NULL	NULL

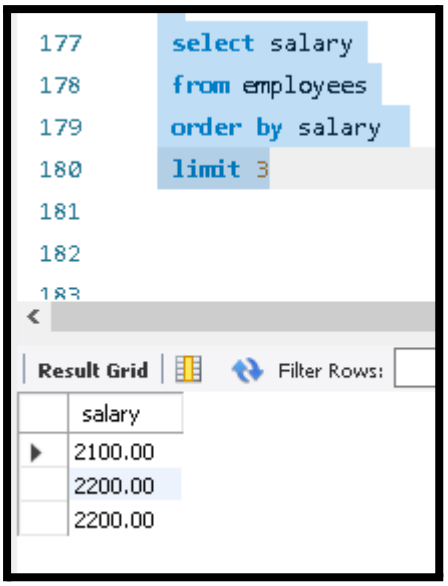
20. Write a query to get 3 maximum salaries.

```
select salary
from employees
order by salary desc
limit 3
```



21. Write a query to get 3 minimum salaries.

```
select salary
from employees
order by salary
limit 3
```



22. Write a query to get nth maximum salaries of employees.

```
select salary
from employees
order by salary desc
LIMIT 1 OFFSET (n-1)
```