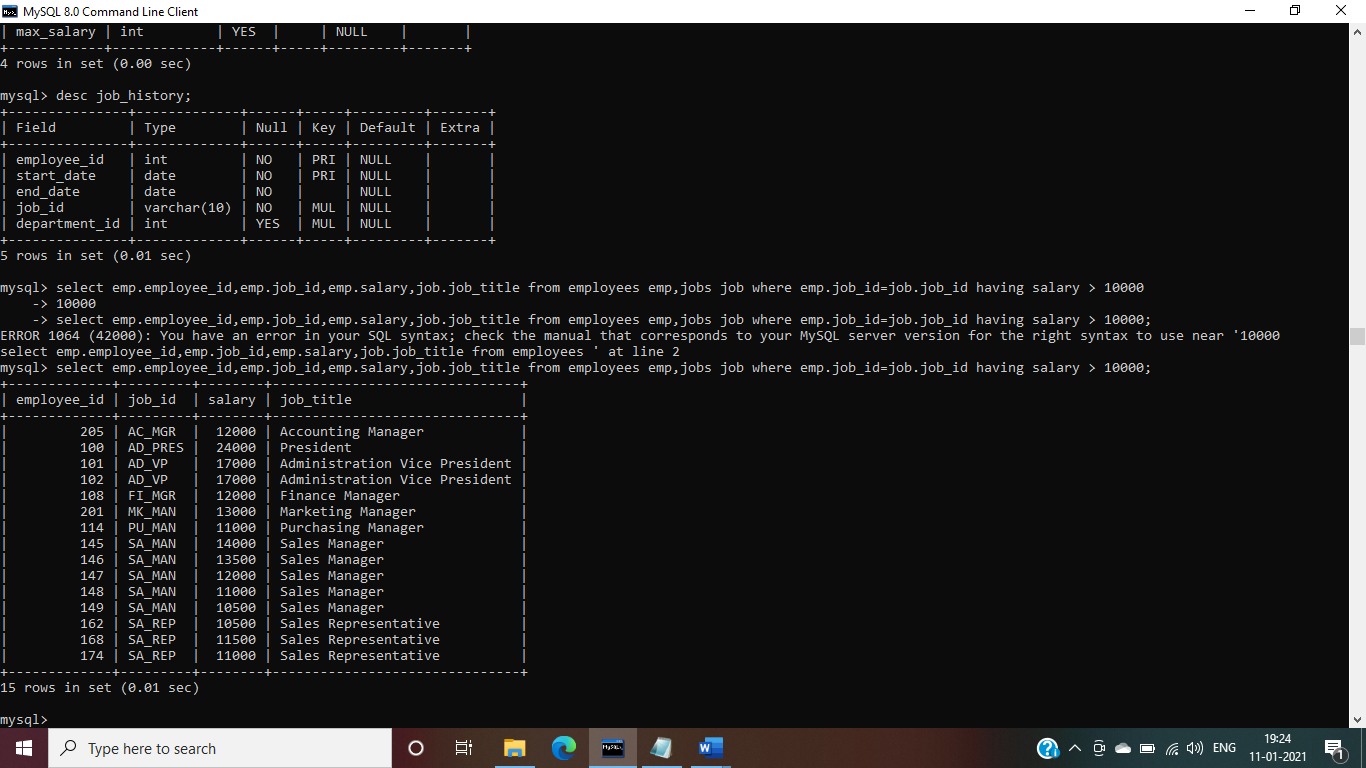
**Select Clause with Where clause**

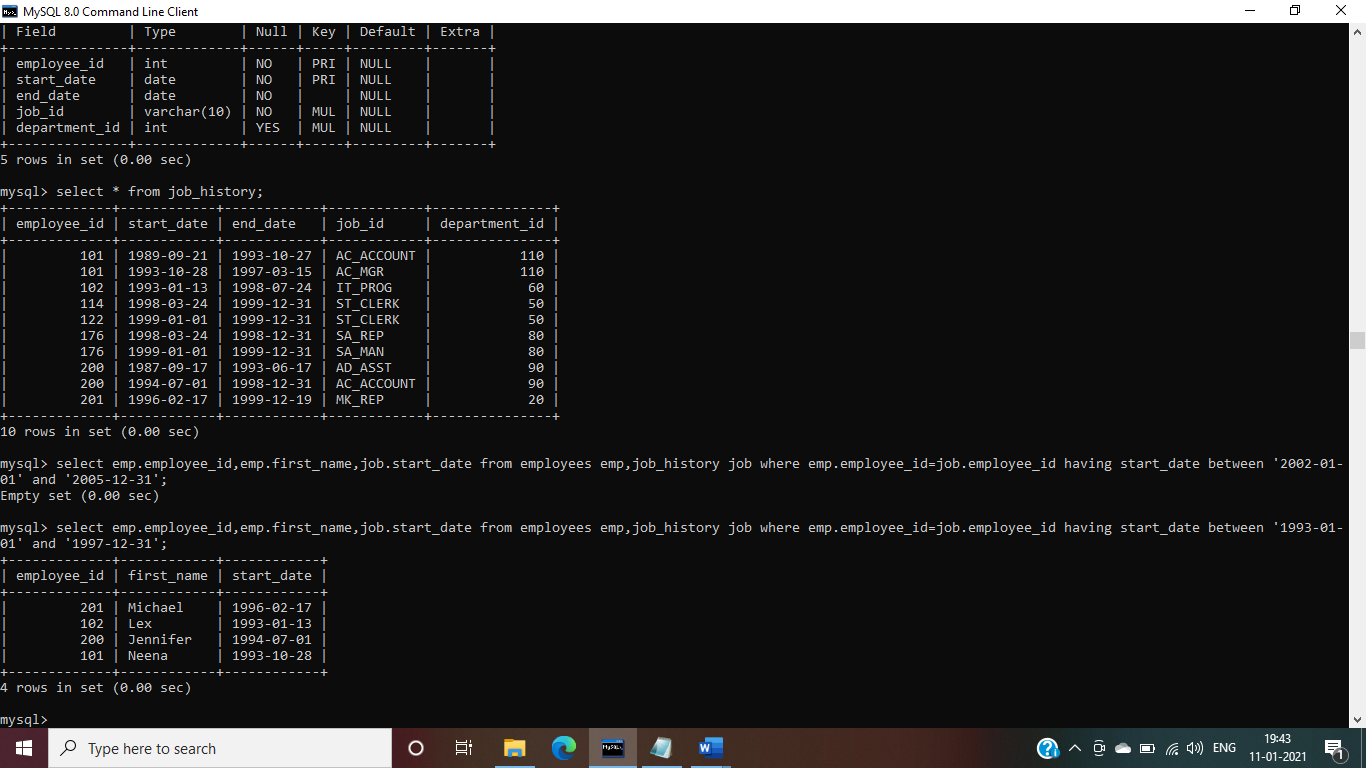
1) Display details of jobs where the minimum salary is greater than 10000.

Ans-select emp.employee\_id,emp.job\_id,emp.salary,job.job\_title from employees emp,jobs job where emp.job\_id=job.job\_id having salary > 10000;



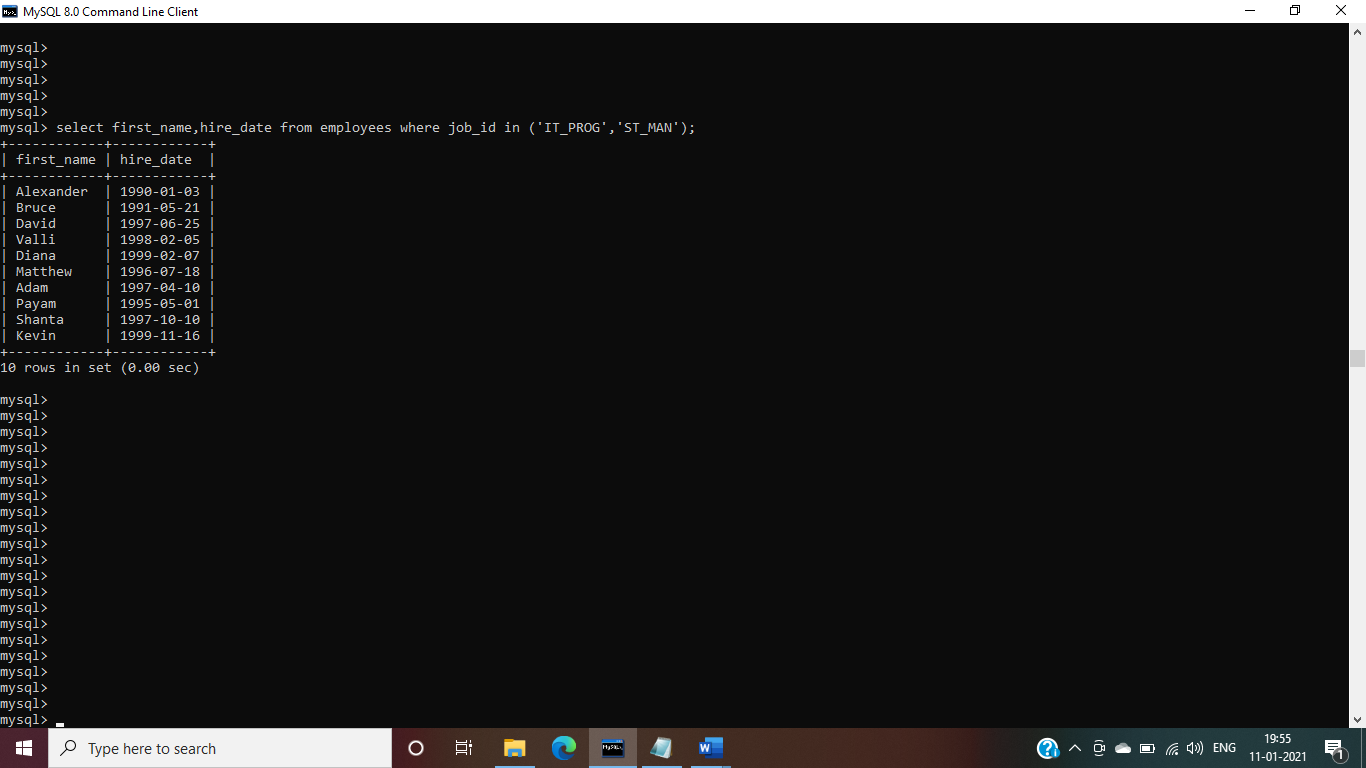
2) Display the first name and join date of the employees who joined between 2002 and 2005.

Ans- select emp.employee\_id,emp.first\_name,job.start\_date from employees emp,job\_history job where emp.employee\_id=job.employee\_id having start\_date between '2002-01-01' and '2005-12-31';



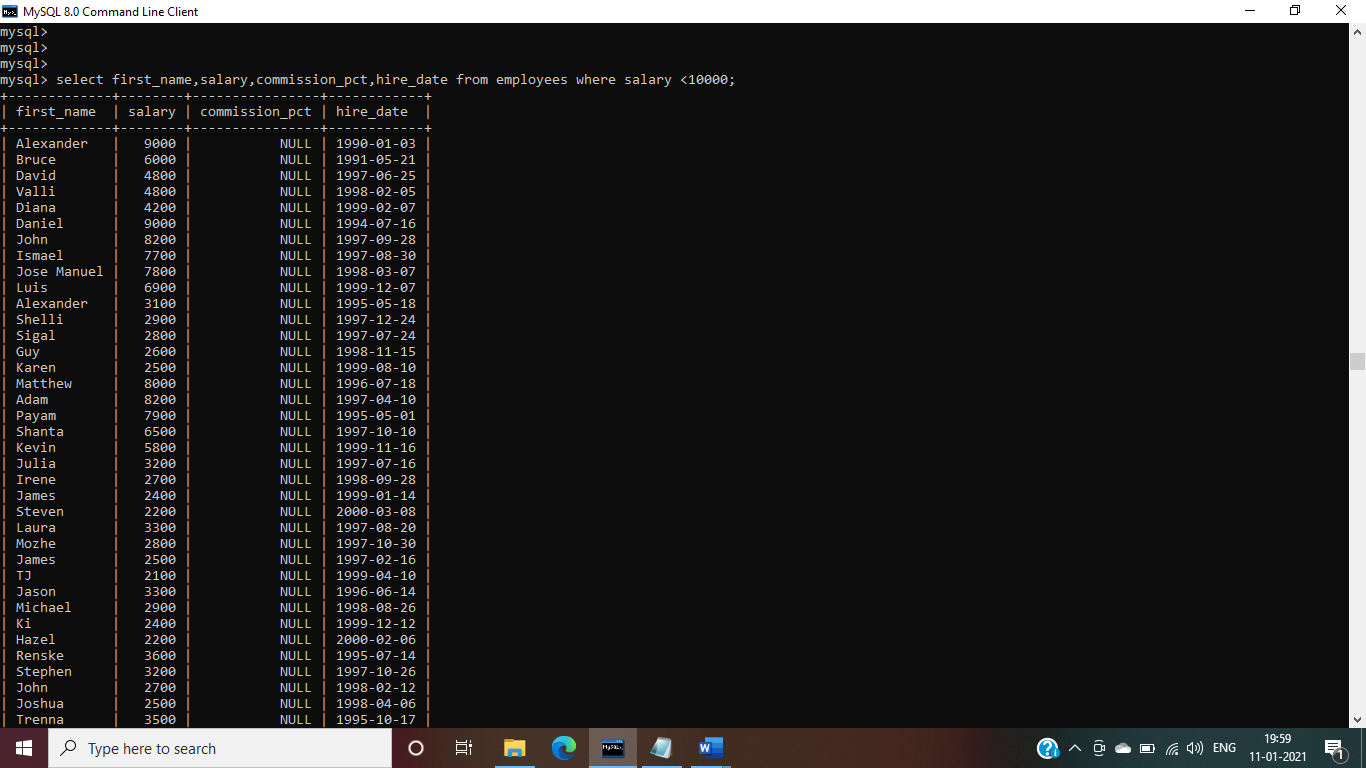
3) Display first name and join date of the employees who is either IT Programmer or Sales Man.

Ans- select first\_name,hire\_date from employees where job\_id in ('IT\_PROG','ST\_MAN');



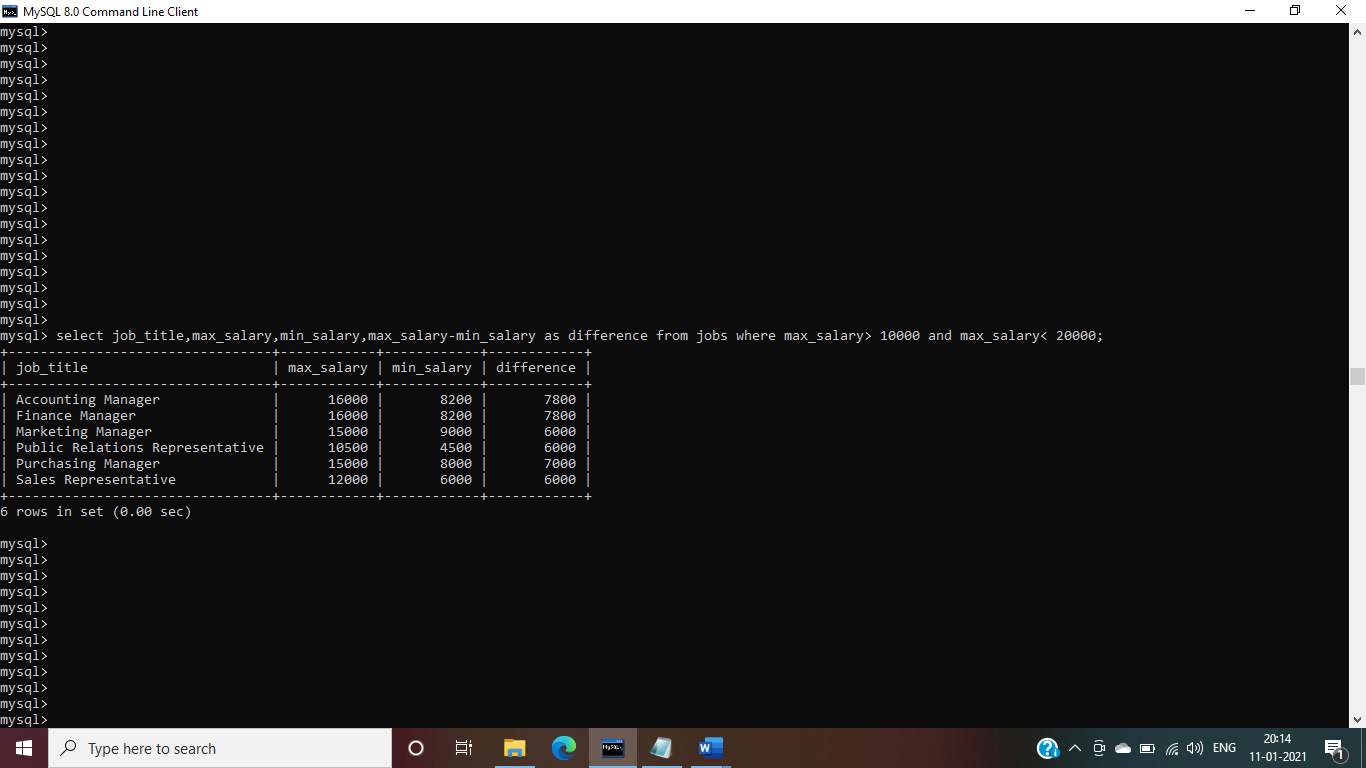
4) Display first name, salary, commission pct, and hire date for employees with salary less than 10000.

Ans- select first\_name,salary,commission\_pct,hire\_date from employees where salary <10000;



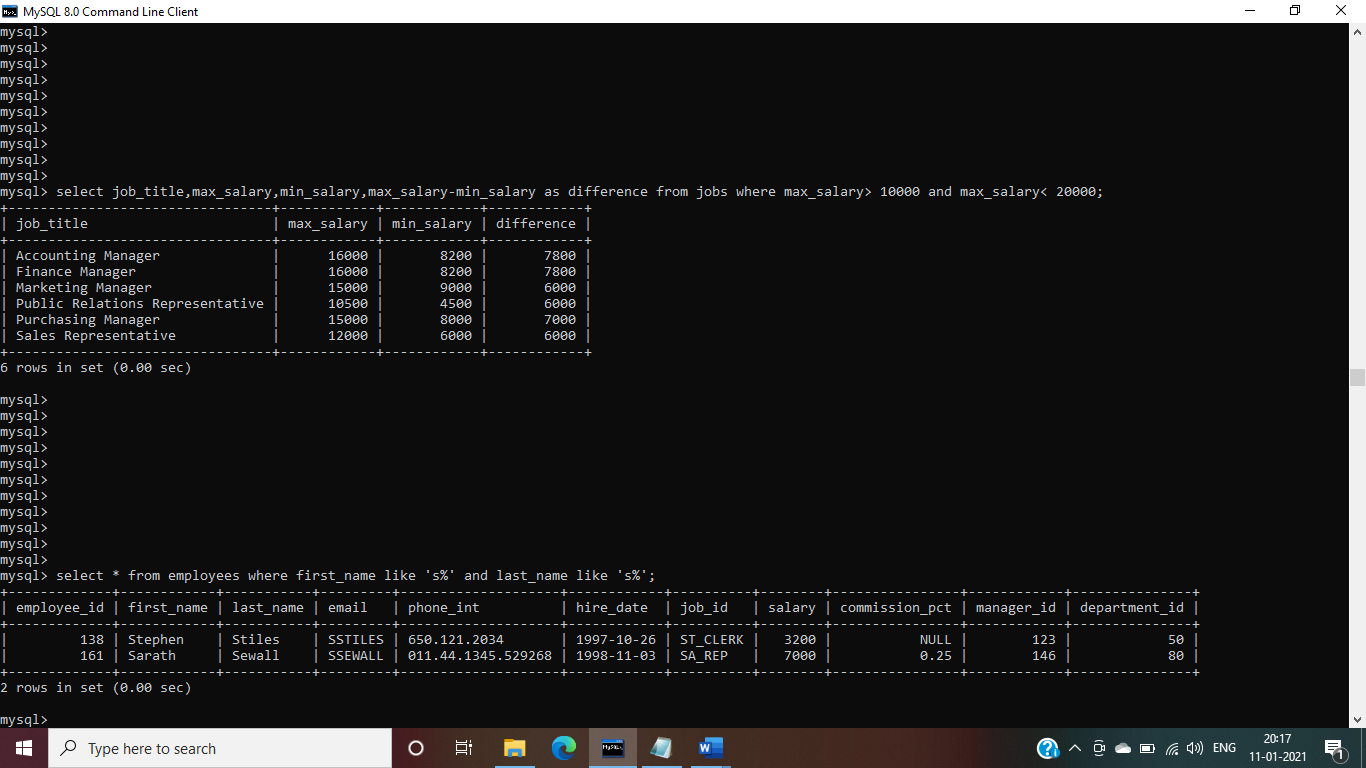
5) Display job Title, the difference between minimum and maximum salaries for jobs with max salary in the range 10000 to 20000.

Ans- select job\_title,max\_salary,min\_salary,max\_salary-min\_salary as difference from jobs where max\_salary> 10000 and max\_salary< 20000;



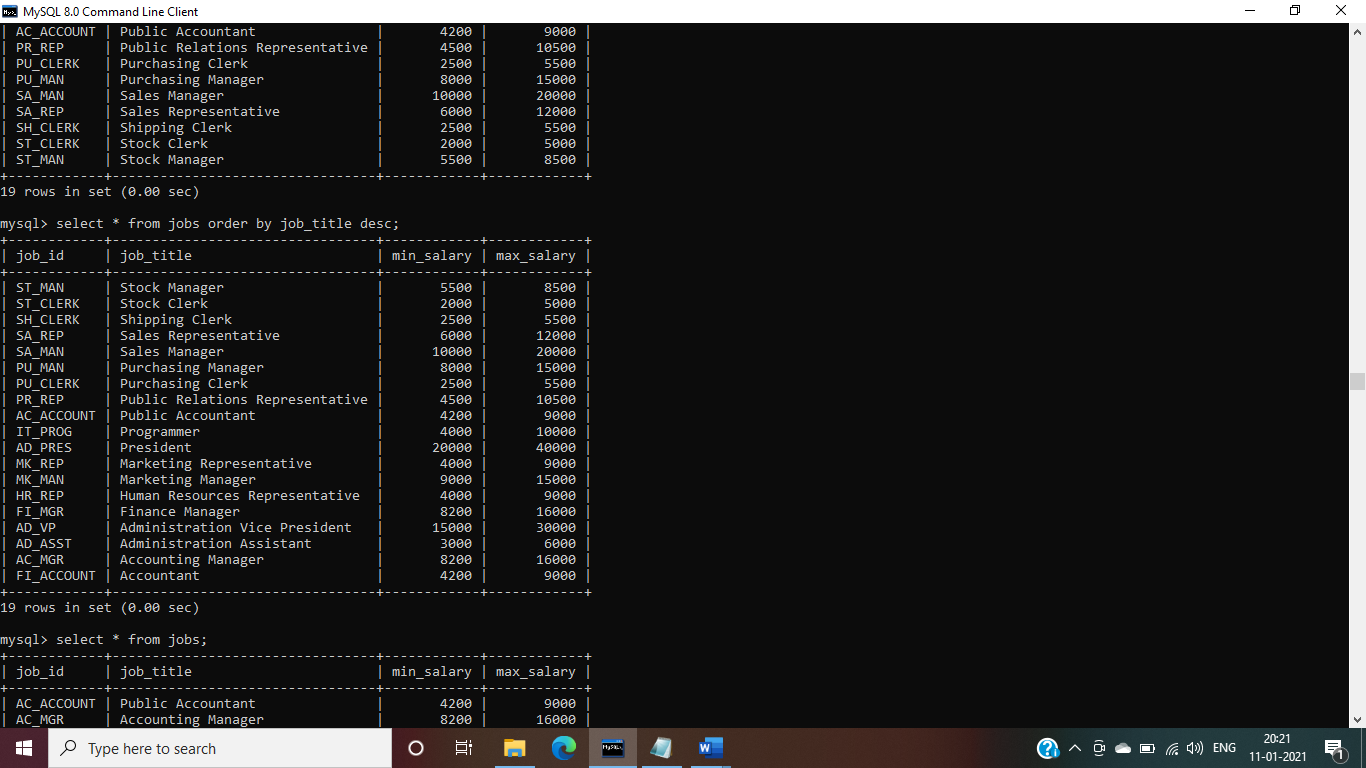
6) Display employees where the first name or last name starts with S.

Ans- select \* from employees where first\_name like 's%' and last\_name like 's%';



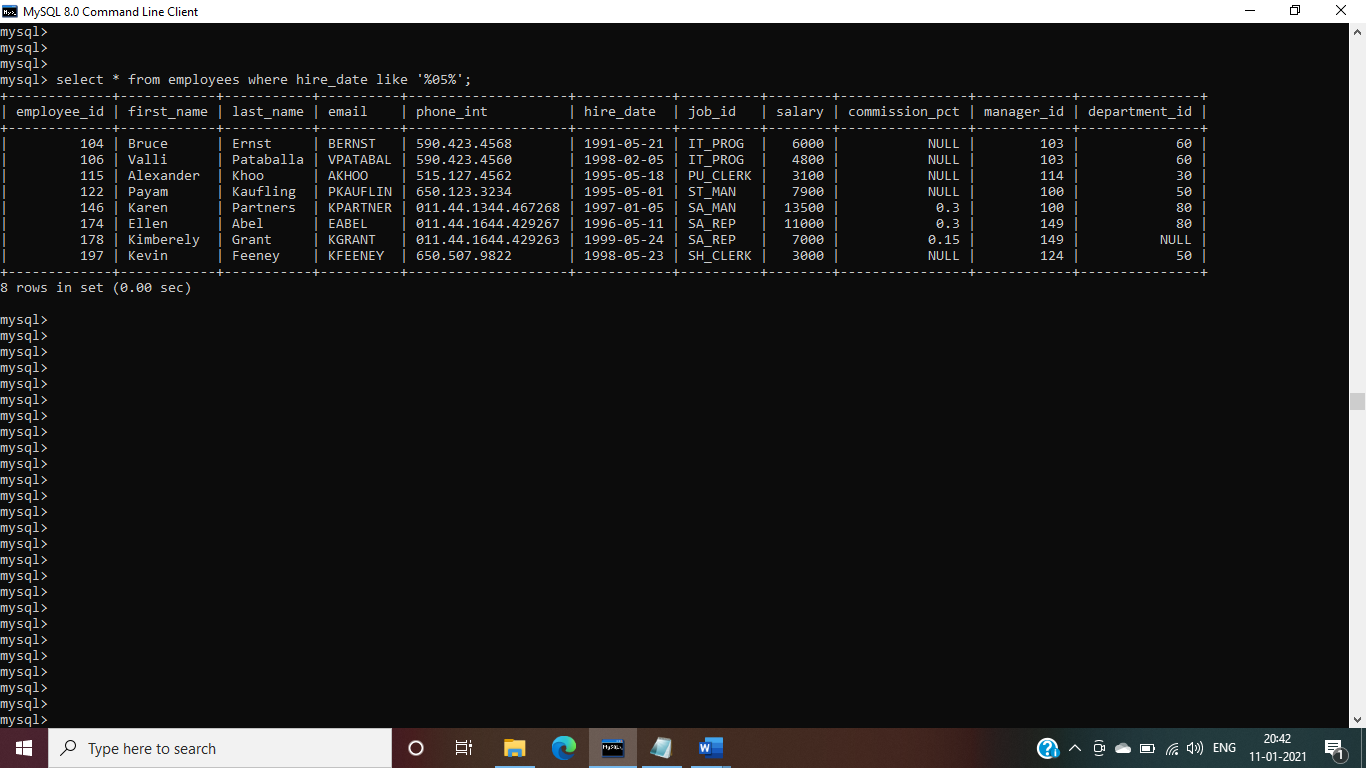
7) Display details of jobs in the descending order of the title.

Ans- select \* from jobs order by job\_title desc;



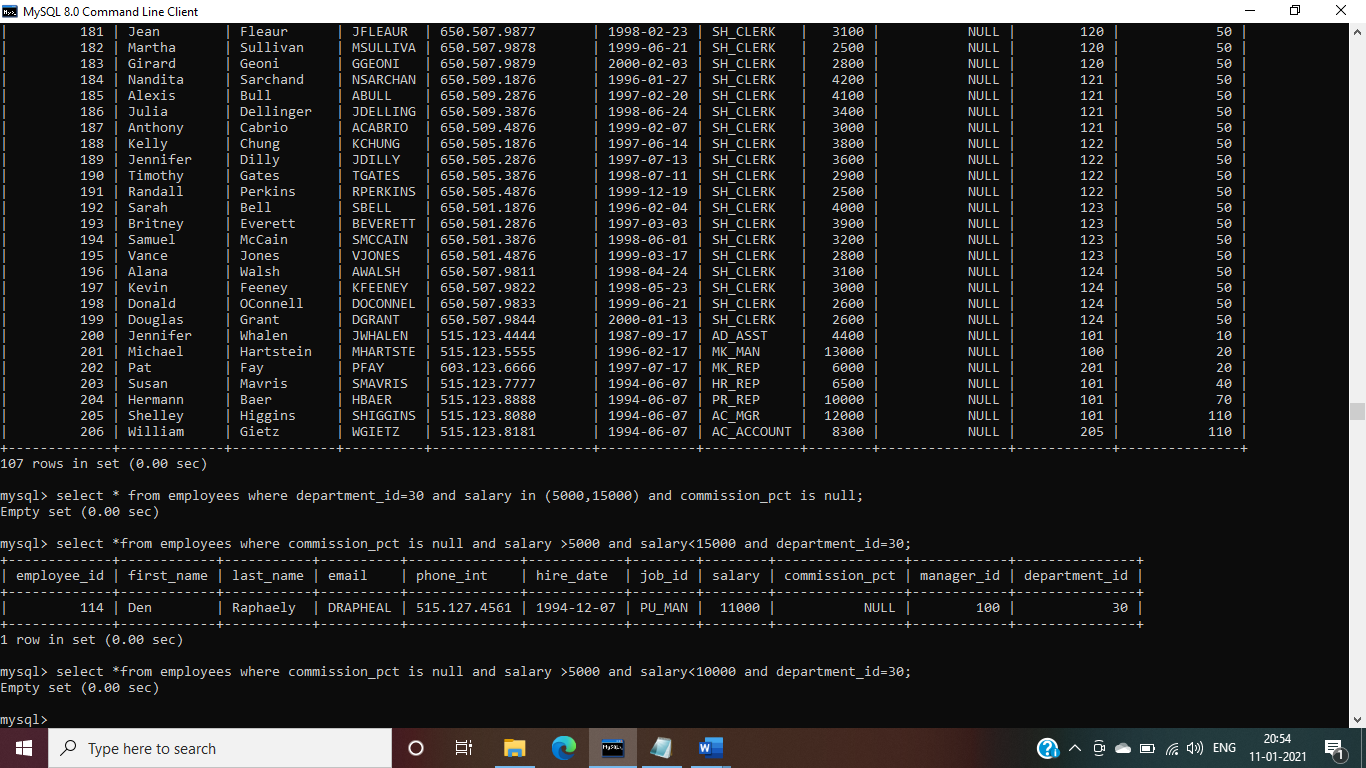
8) Display employees who joined in the month of May.

Ans- select \* from employees where hire\_date like '%05%';



9) Display details of the employees where commission percentage is null and salary in the range 5000 to 10000 and department is 30.

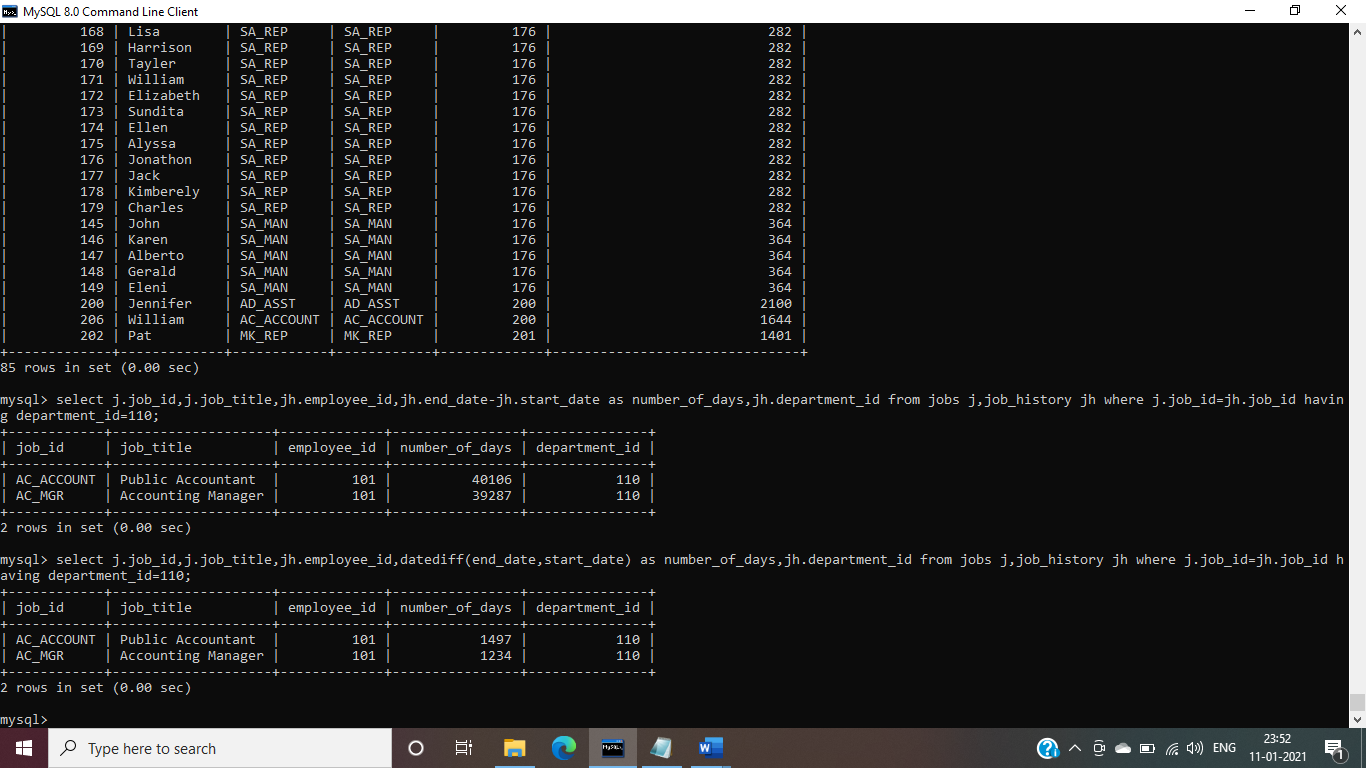
Ans- select \*from employees where commission\_pct is null and salary >5000 and salary<10000 and department\_id=30;



**Join**

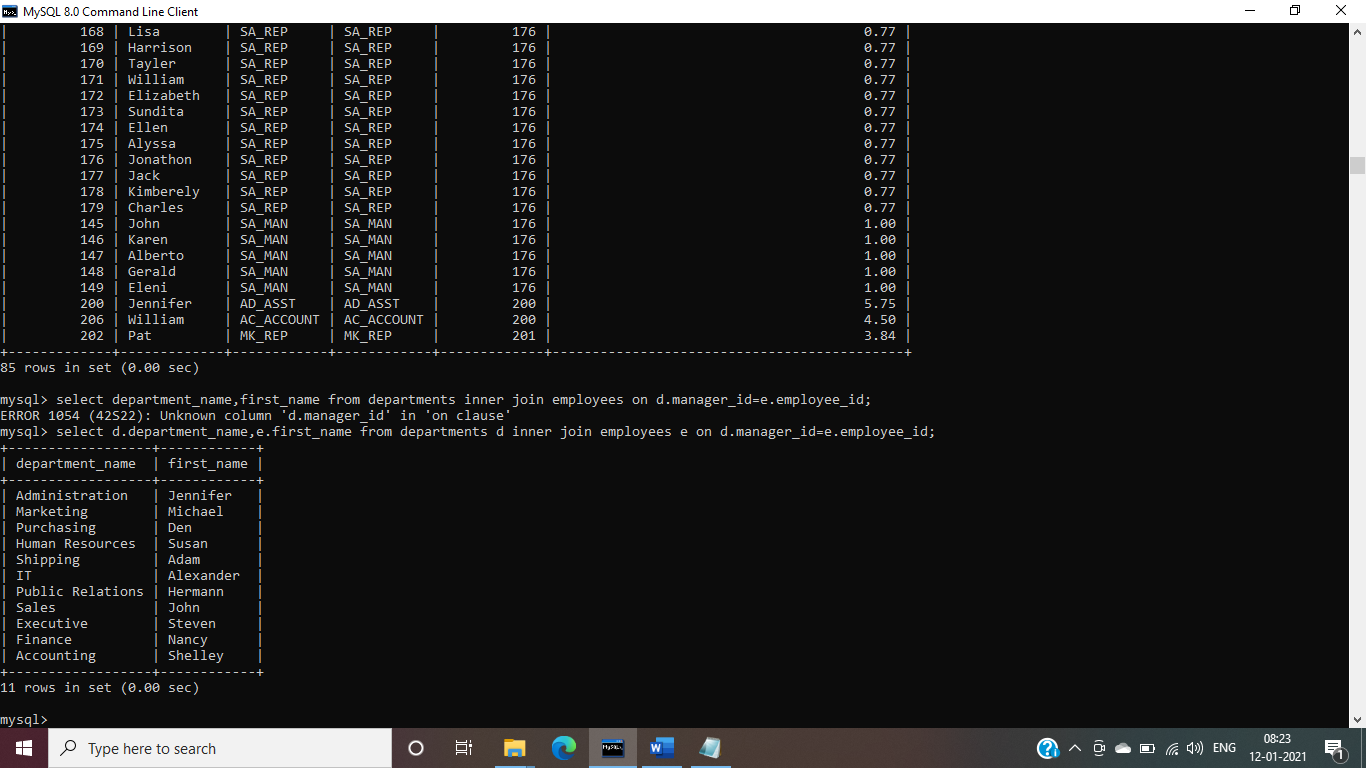
1). Display job title, employee ID, number of days between ending date and starting date for all jobs in department 110 from job history.

Ans-select j.job\_id,j.job\_title,jh.employee\_id,datediff(end\_date,start\_date) as number\_of\_days,jh.department\_id from jobs j,job\_history jh where j.job\_id=jh.job\_id having department\_id=110;



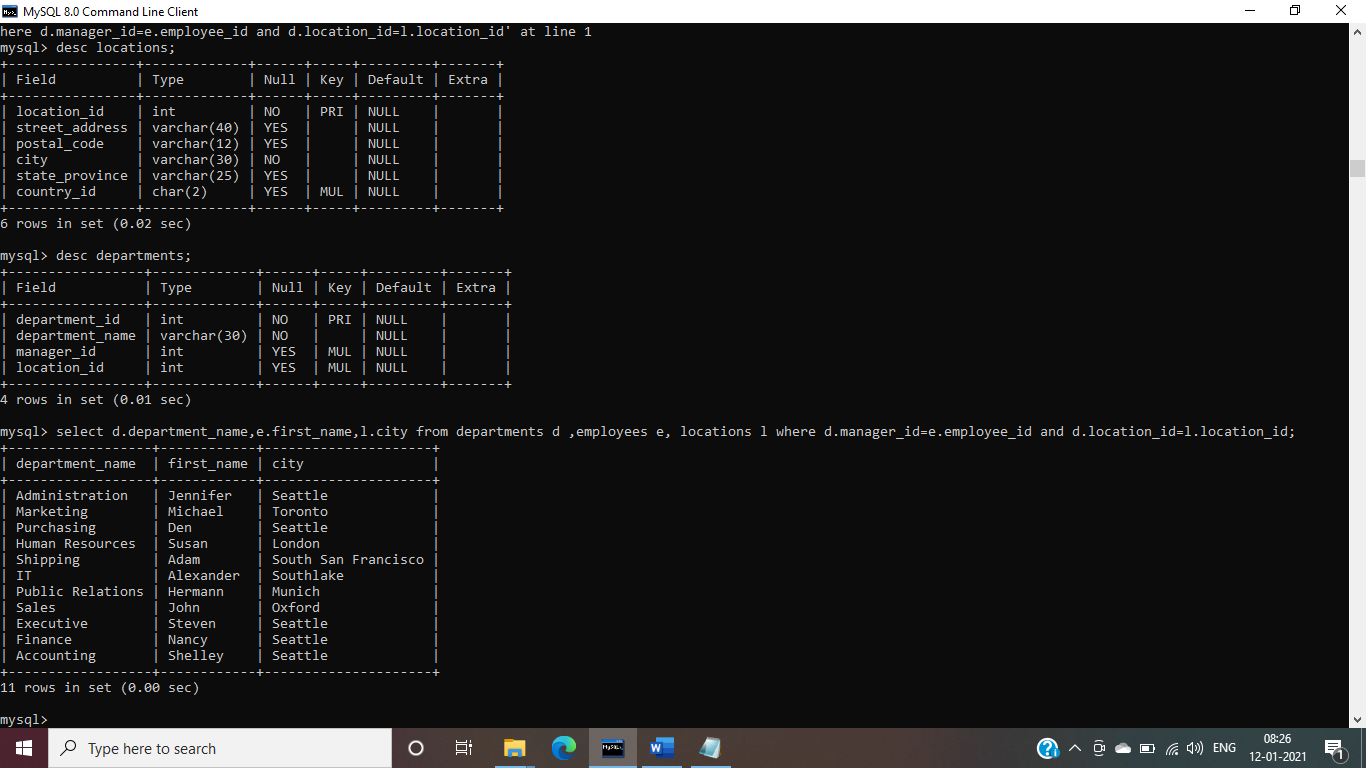
2) Display department name and manager first name.

Ans-select select d.department\_name,e.first\_name from departments d inner join employees e on d.manager\_id=e.employee\_id;



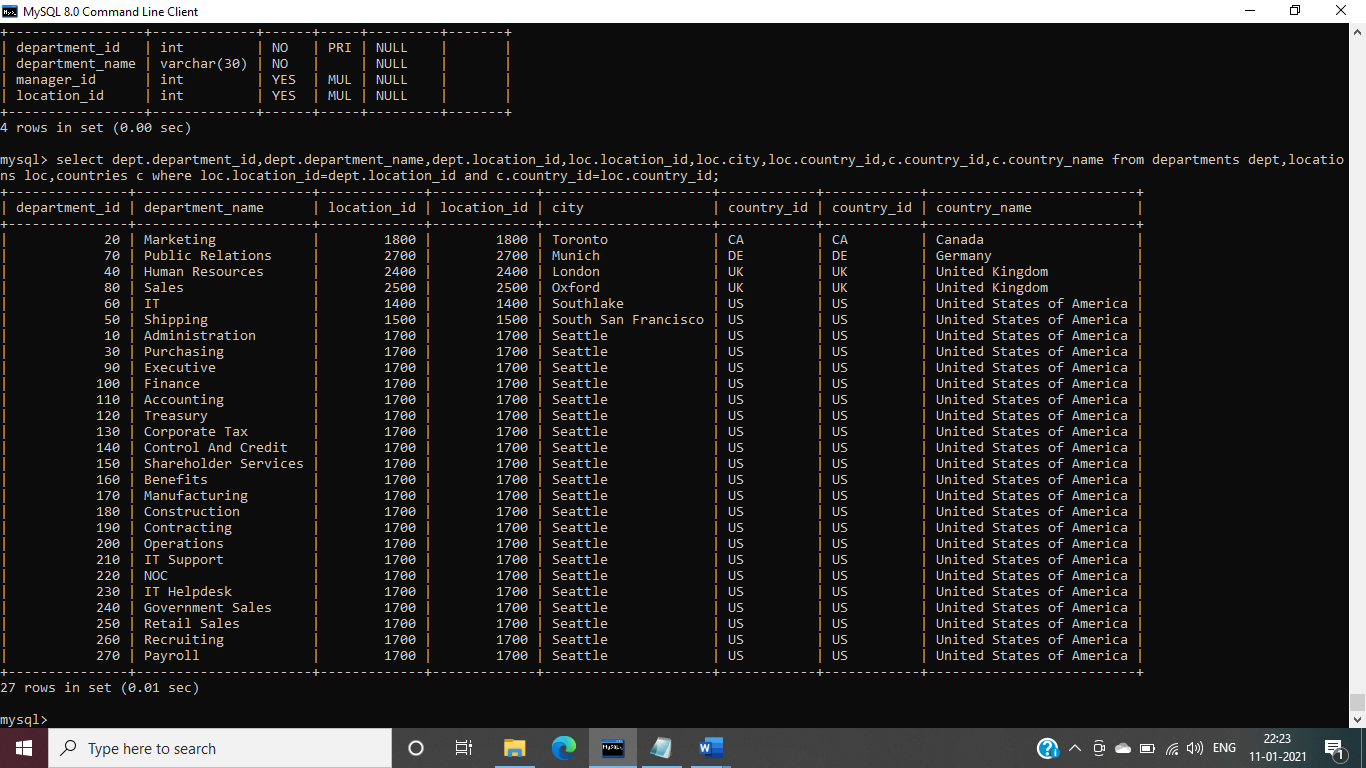
3) Display department name, manager name, and city.

Ans- select d.department\_name,e.first\_name,l.city from departments d ,employees e, locations l where d.manager\_id=e.employee\_id and d.location\_id=l.location\_id;



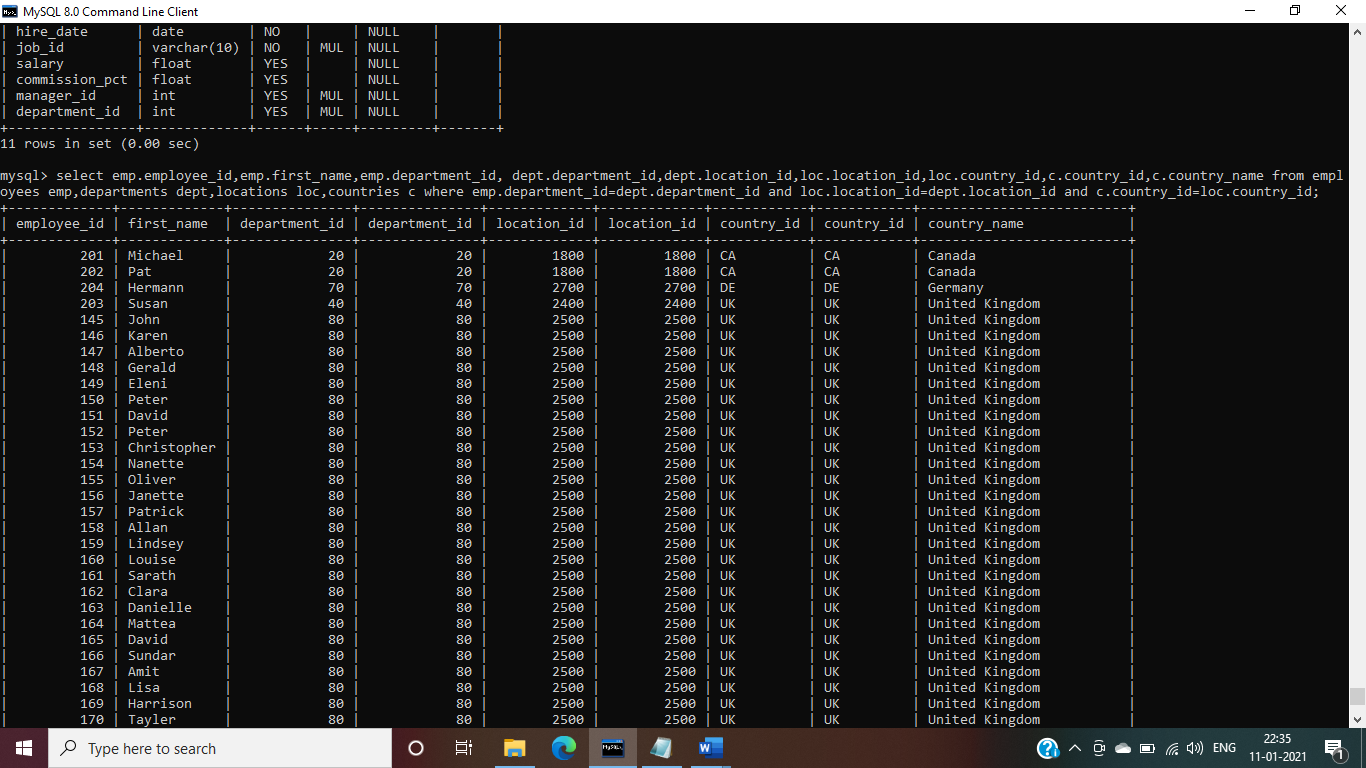
4) Display country name, city, and department name.

Ans- select dept.department\_id,dept.department\_name,dept.location\_id,loc.location\_id,loc.city,loc.country\_id,c.country\_id,c.country\_name from departments dept,locations loc,countries c where loc.location\_id=dept.location\_id and c.country\_id=loc.country\_id;



5) Display employee name and country in which he is working.

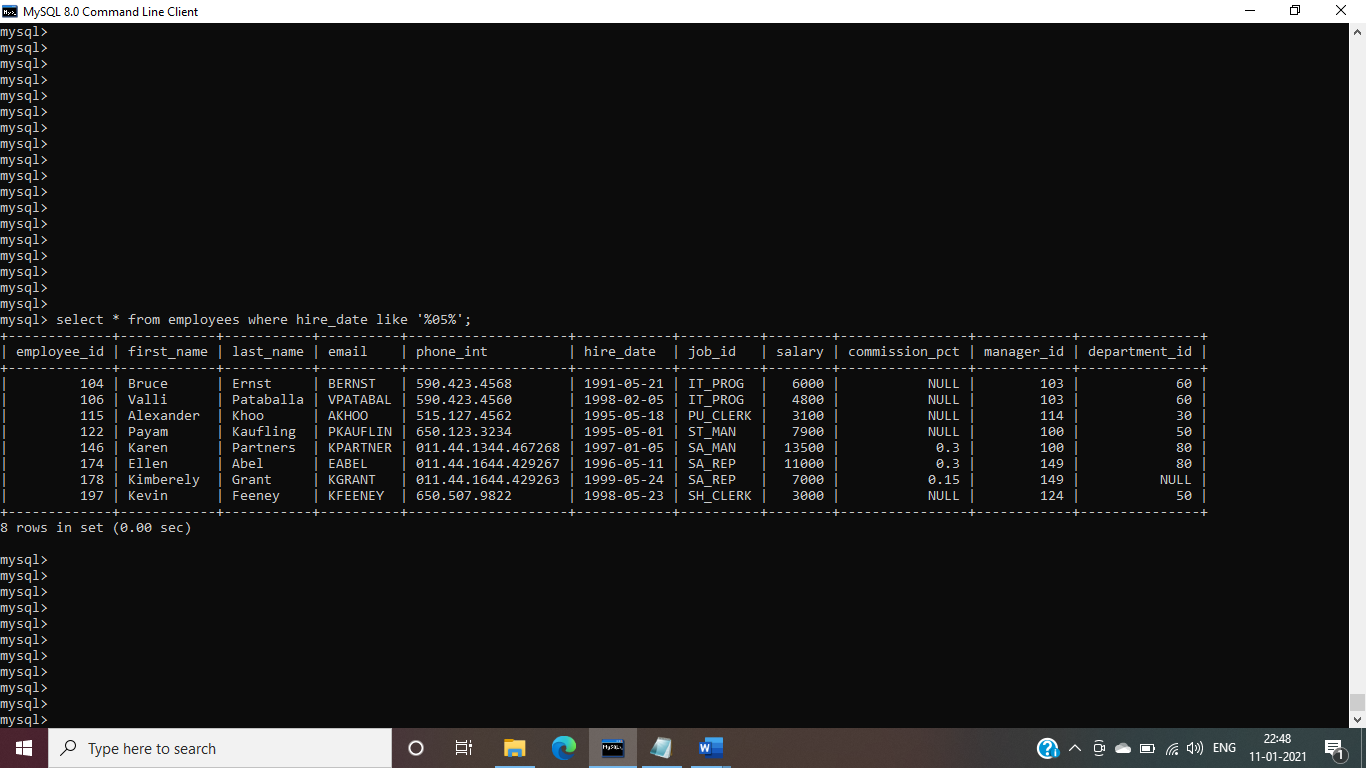
Ans- select emp.employee\_id,emp.first\_name,emp.department\_id, dept.department\_id,dept.location\_id,loc.location\_id,loc.country\_id,c.country\_id,c.country\_name from employees emp,departments dept,locations loc,countries c where emp.department\_id=dept.department\_id and loc.location\_id=dept.location\_id and c.country\_id=loc.country\_id;



**Functions**

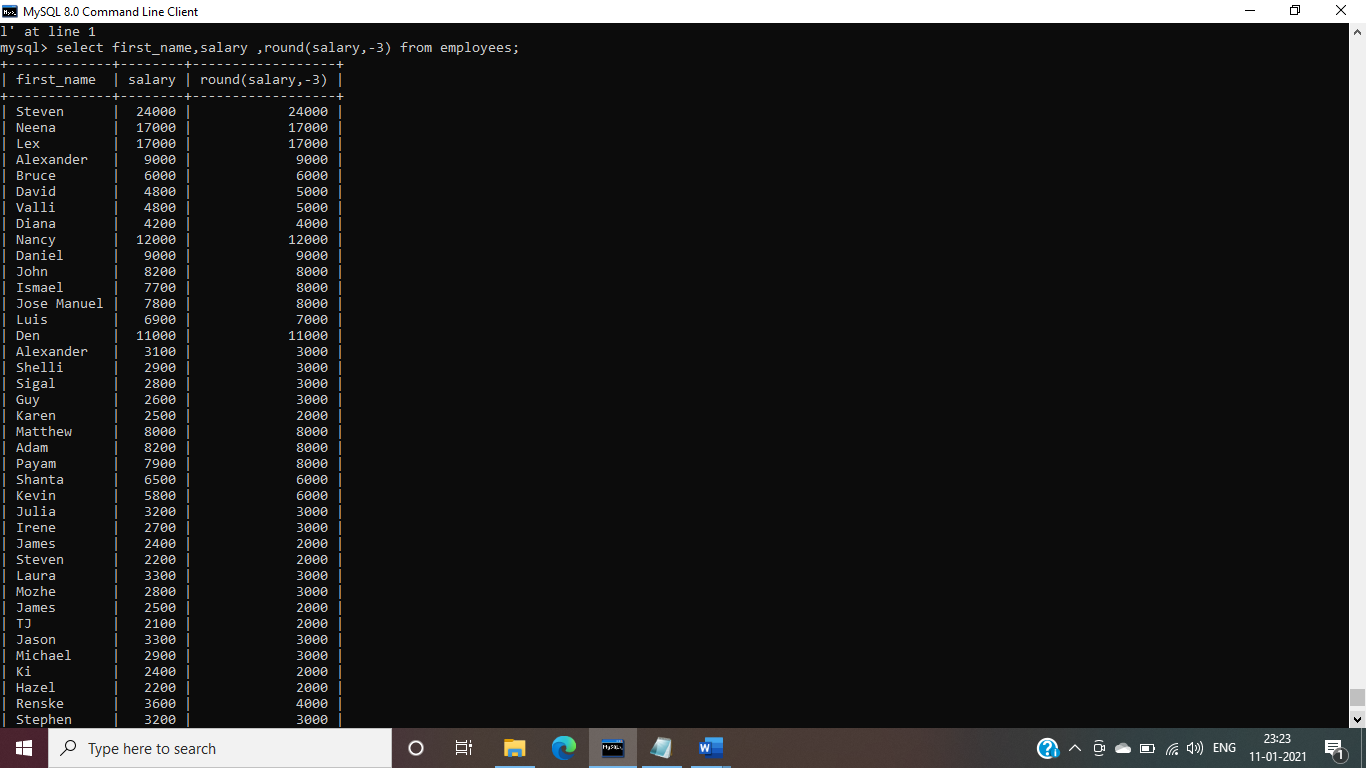
1. Display employees who joined in the month of May.

Ans- select \* from employees where hire\_date like '%05%';



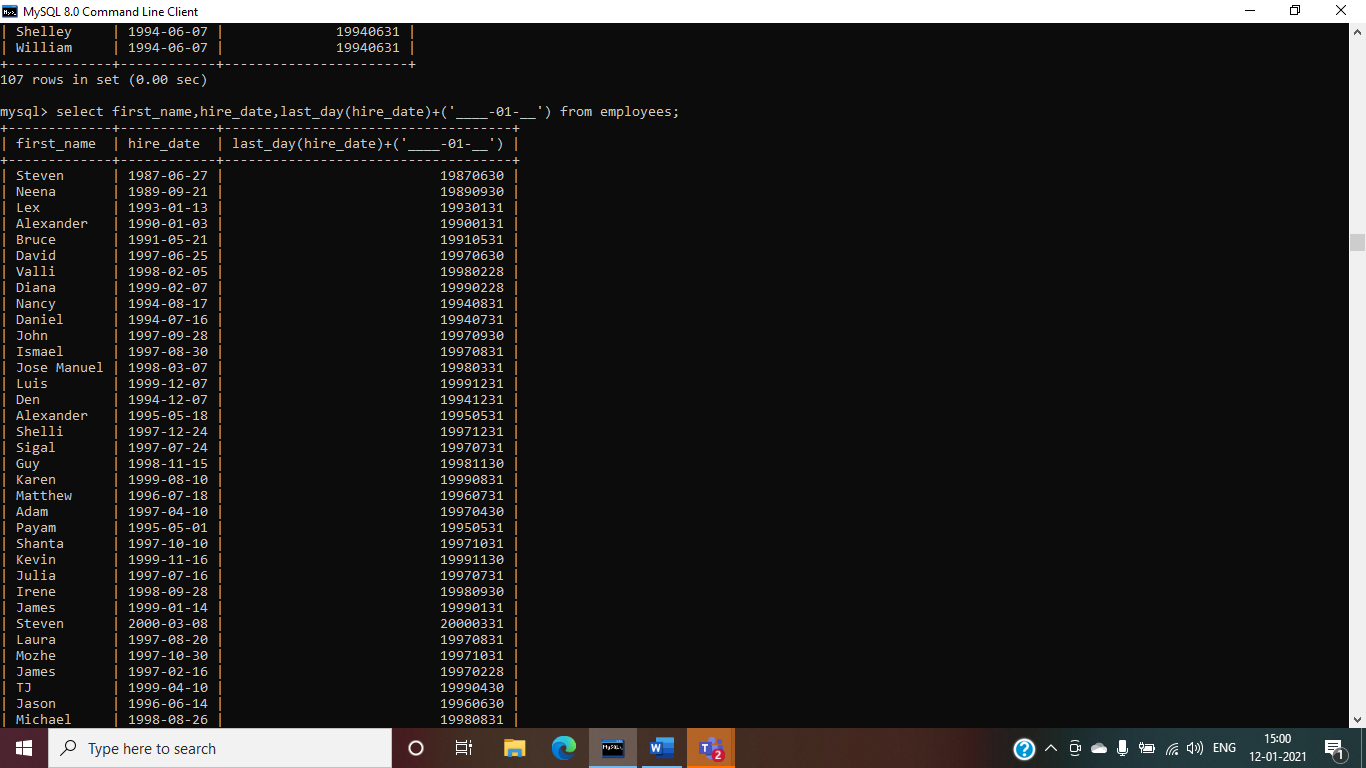
2. Display first name, salary, and round the salary to thousands.

Ans- select first\_name,salary ,round(salary,-3) from employees;



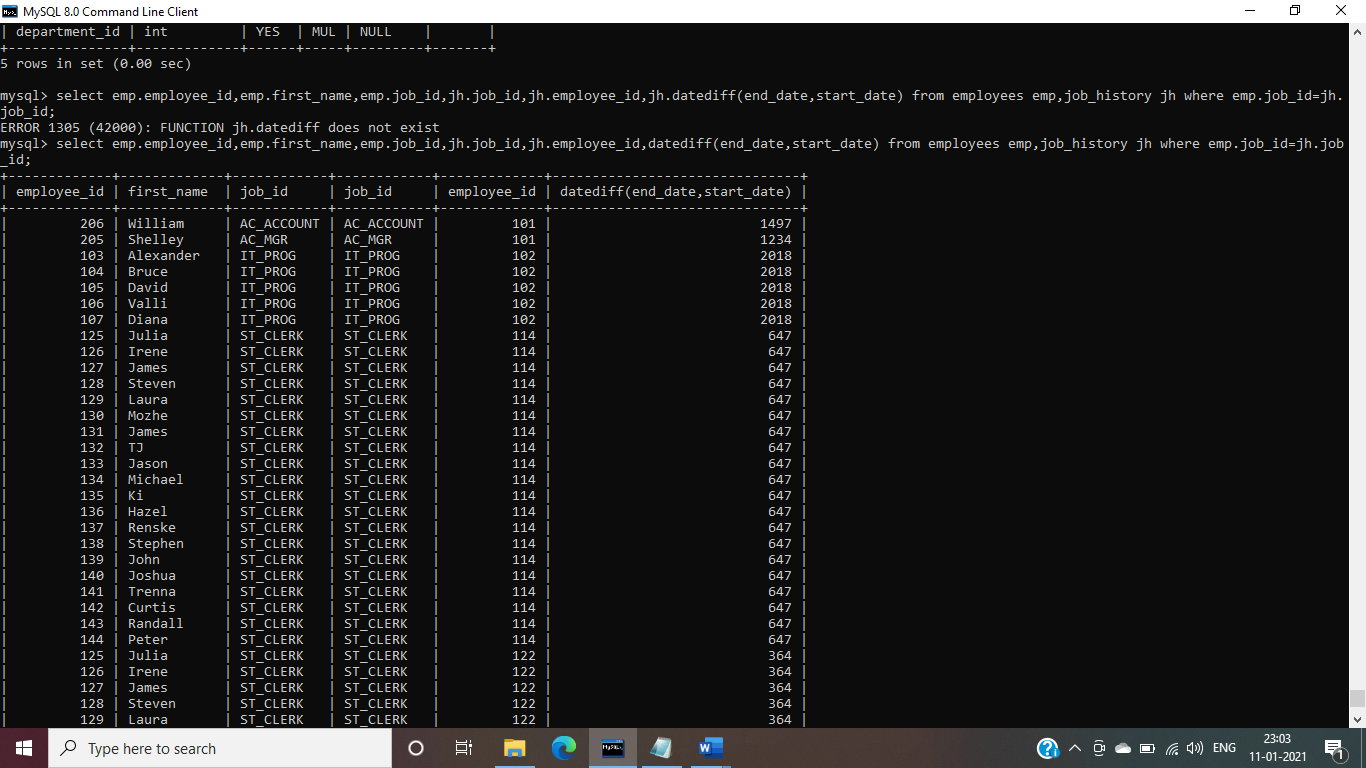
3. Display first name and date of first salary of the employees.

Ans-select first\_name,hire\_date,last\_day(hire\_date)+('\_\_\_\_-01-\_\_') from employees;



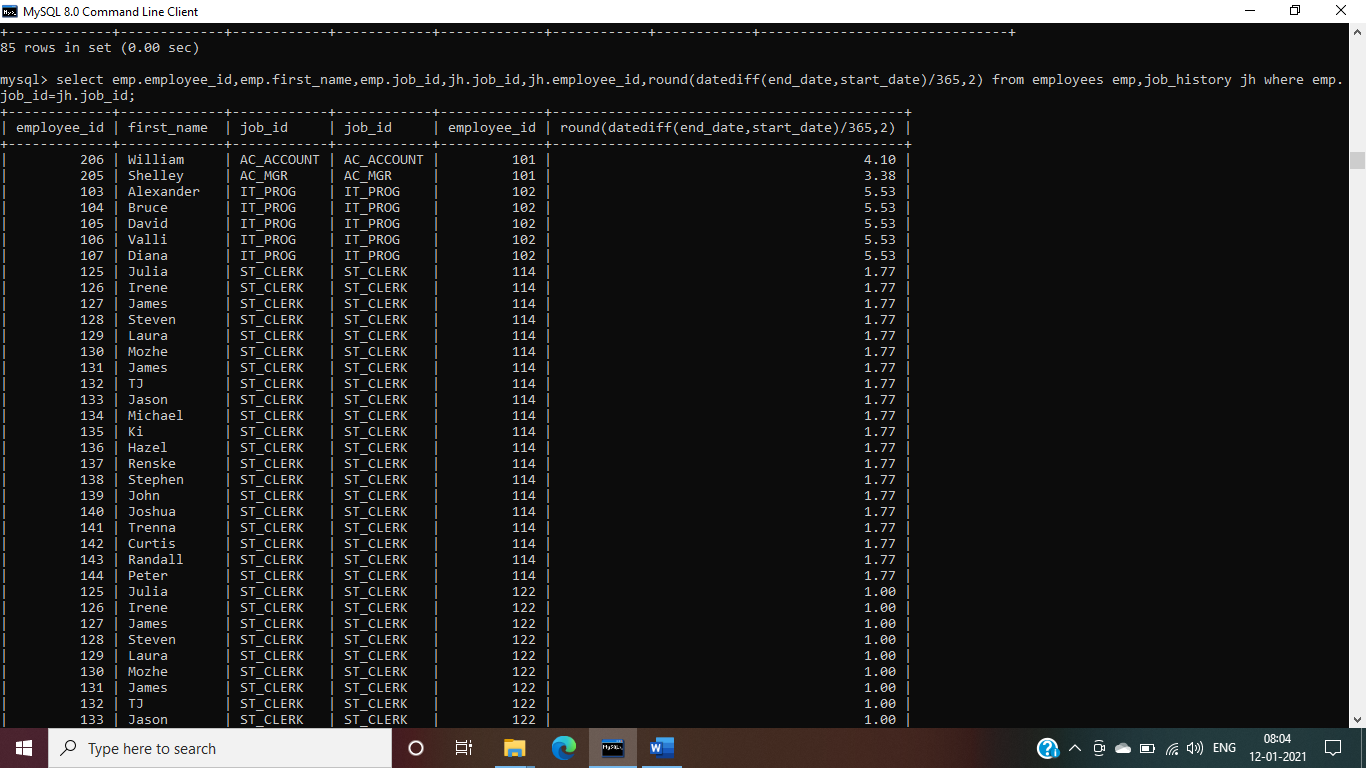
4. Display first name and experience of the employees.

Ans- select emp.employee\_id,emp.first\_name,emp.job\_id,jh.job\_id,jh.employee\_id,datediff(end\_date,start\_date) from employees emp,job\_history jh where emp.job\_id=jh.job\_id;



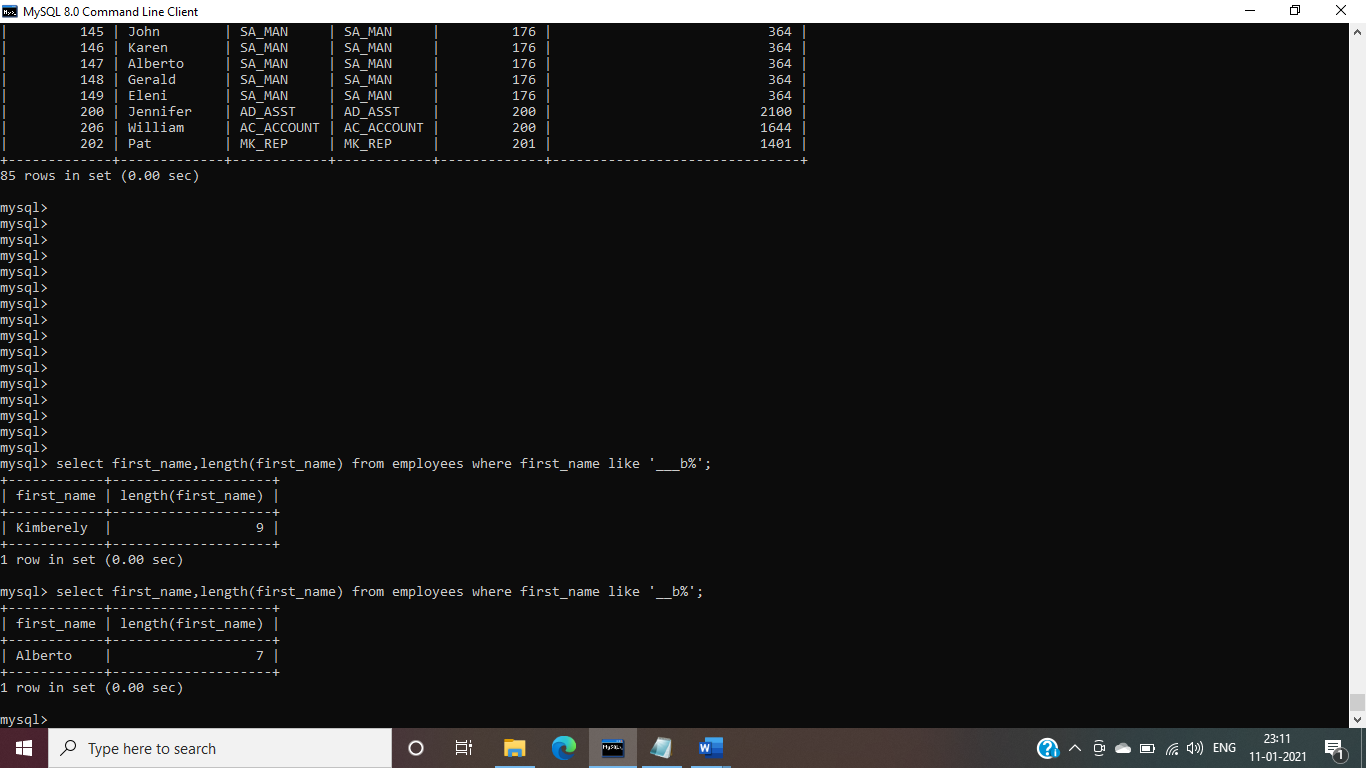
Or

select emp.employee\_id,emp.first\_name,emp.job\_id,jh.job\_id,jh.employee\_id,round(datediff(end\_date,start\_date)/365,2) from employees emp,job\_history jh where emp.job\_id=jh.job\_id;



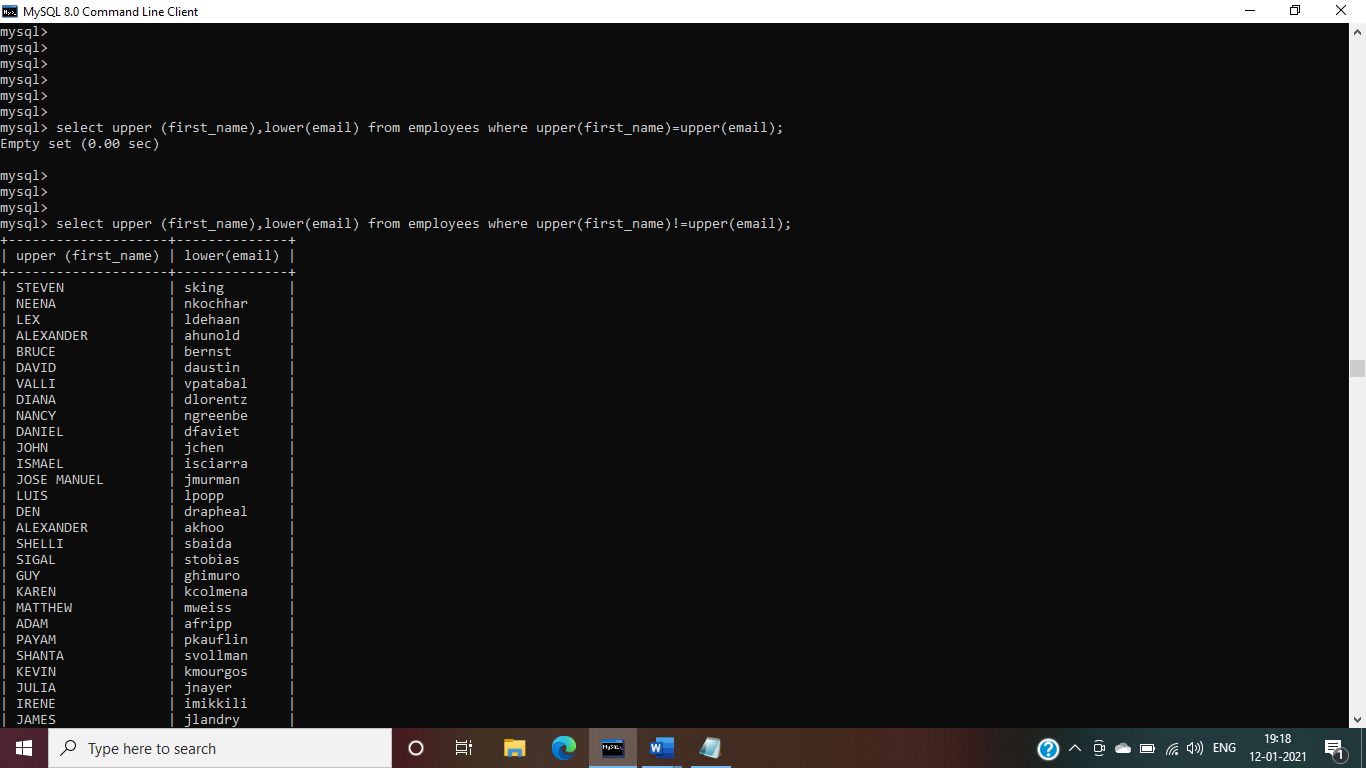
5. Display the length of first name for employees where last name contain character ‘b’ after 3rd position.

Ans- select first\_name,length(first\_name) from employees where first\_name like '\_\_\_b%';



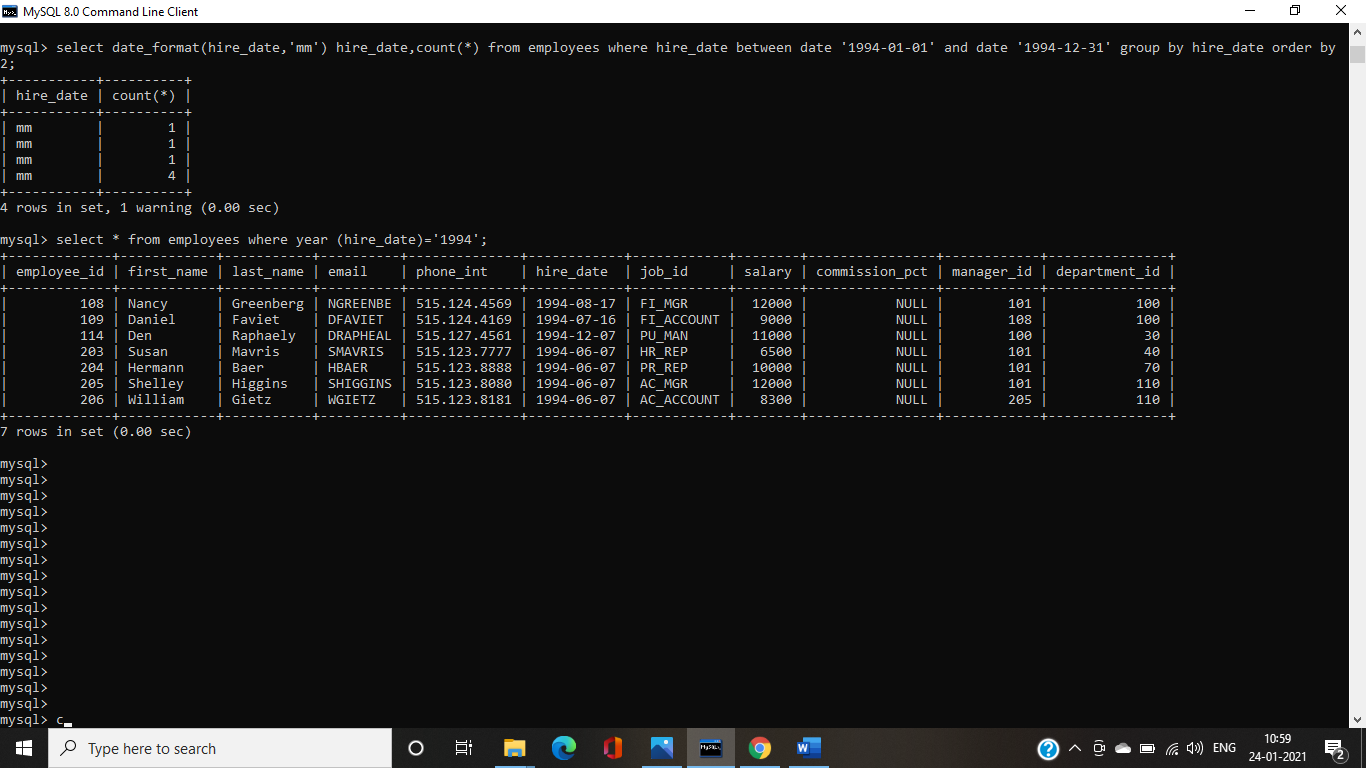
6. Display first name in upper case and email address in lower case for employees where the first name and email address are same irrespective of the case.

Ans-select upper (first\_name),lower(email) from employees where upper(first\_name)=upper(email);



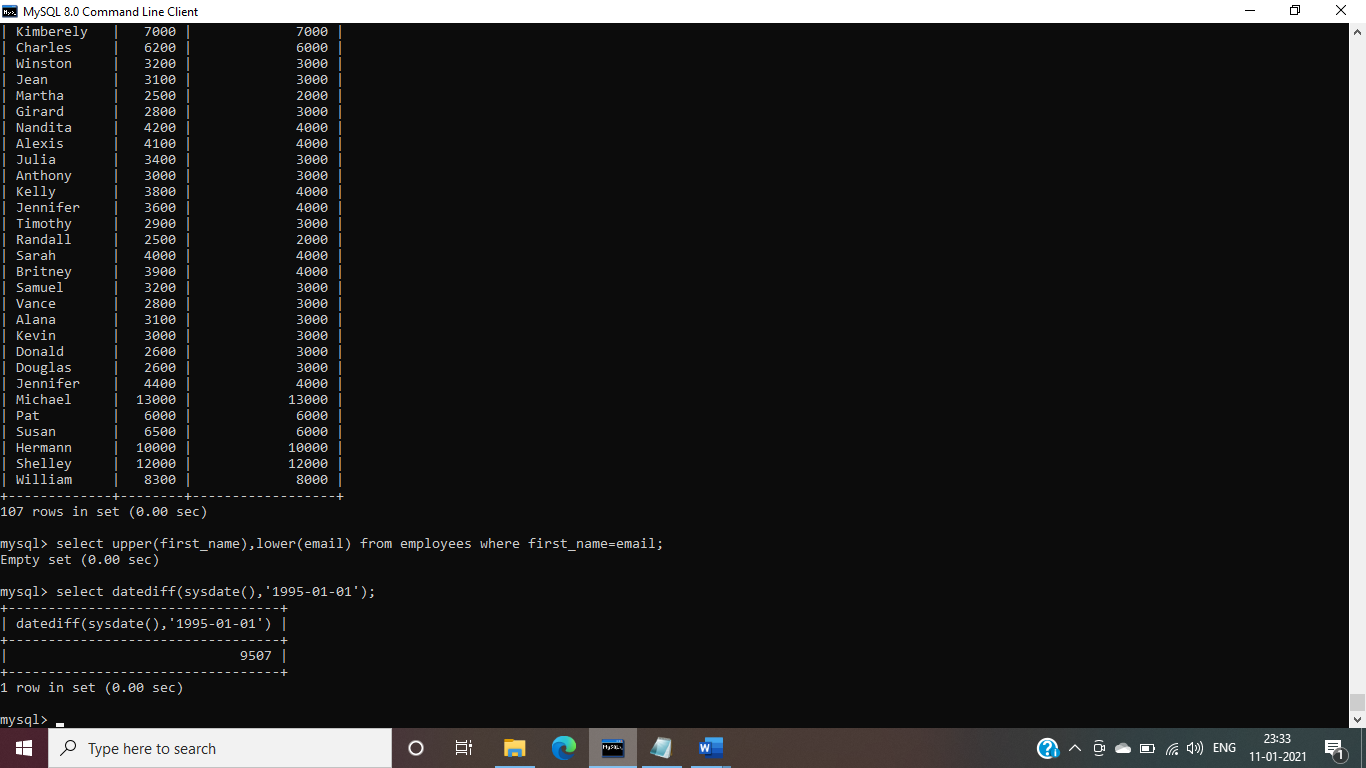
7. Display employees who joined in the current year.

Ans- select \* from employees where year (hire\_date)='1994';



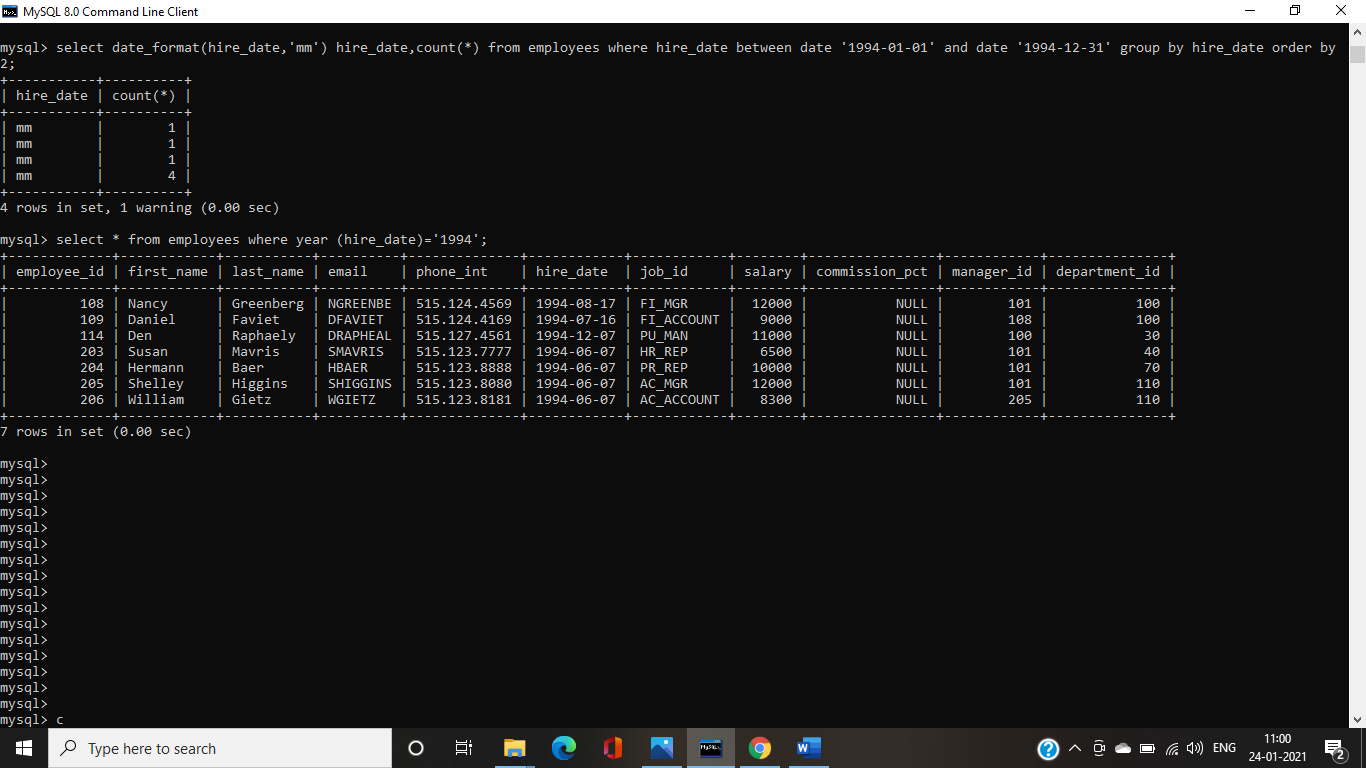
8. Display the number of days between system date and 1st January 1995.

Ans- select datediff(sysdate(),'1995-01-01');



9. Display how many employees joined in each month of the current year.

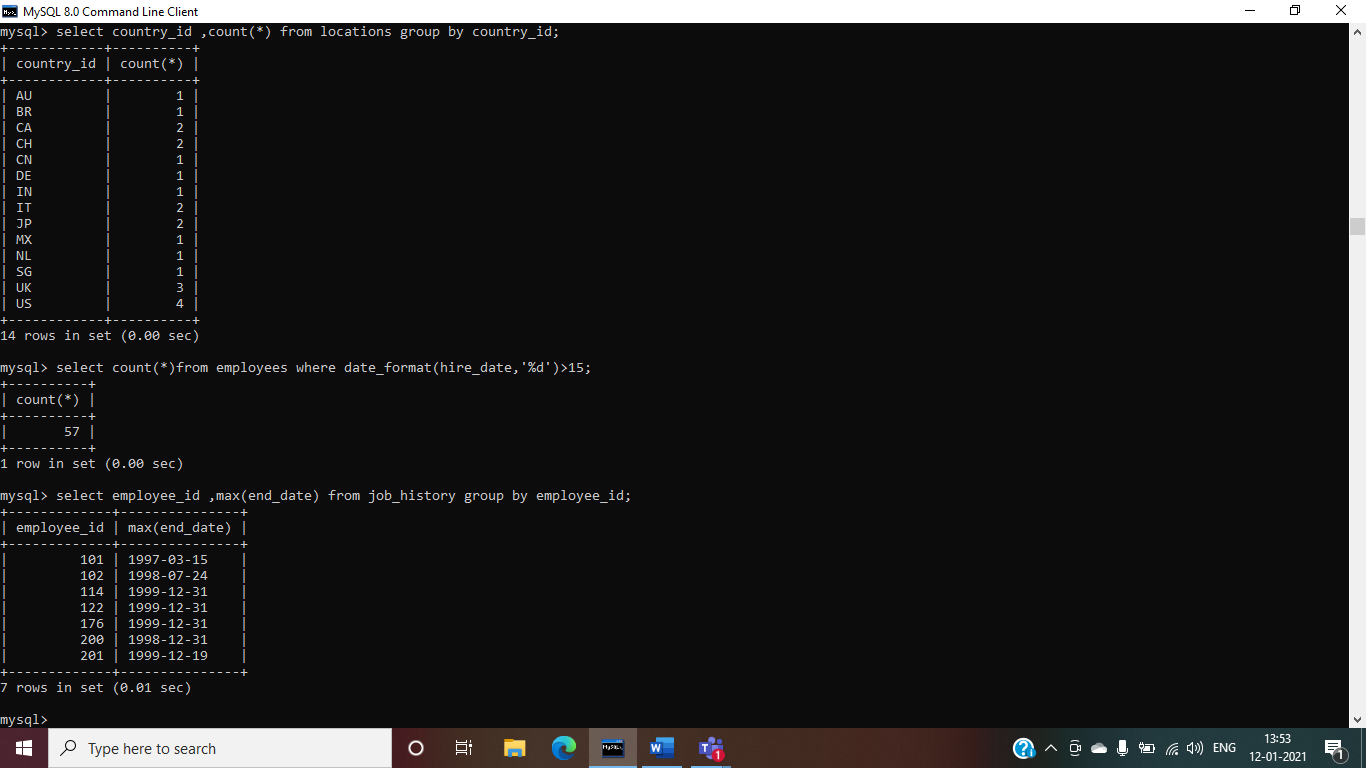
Ans- select date\_format(hire\_date,'mm') hire\_date,count(\*) from employees where hire\_date between date '1994-01-01' and date '1994-12-31' group by hire\_date order by 2;



**MySQL Aggregate function**

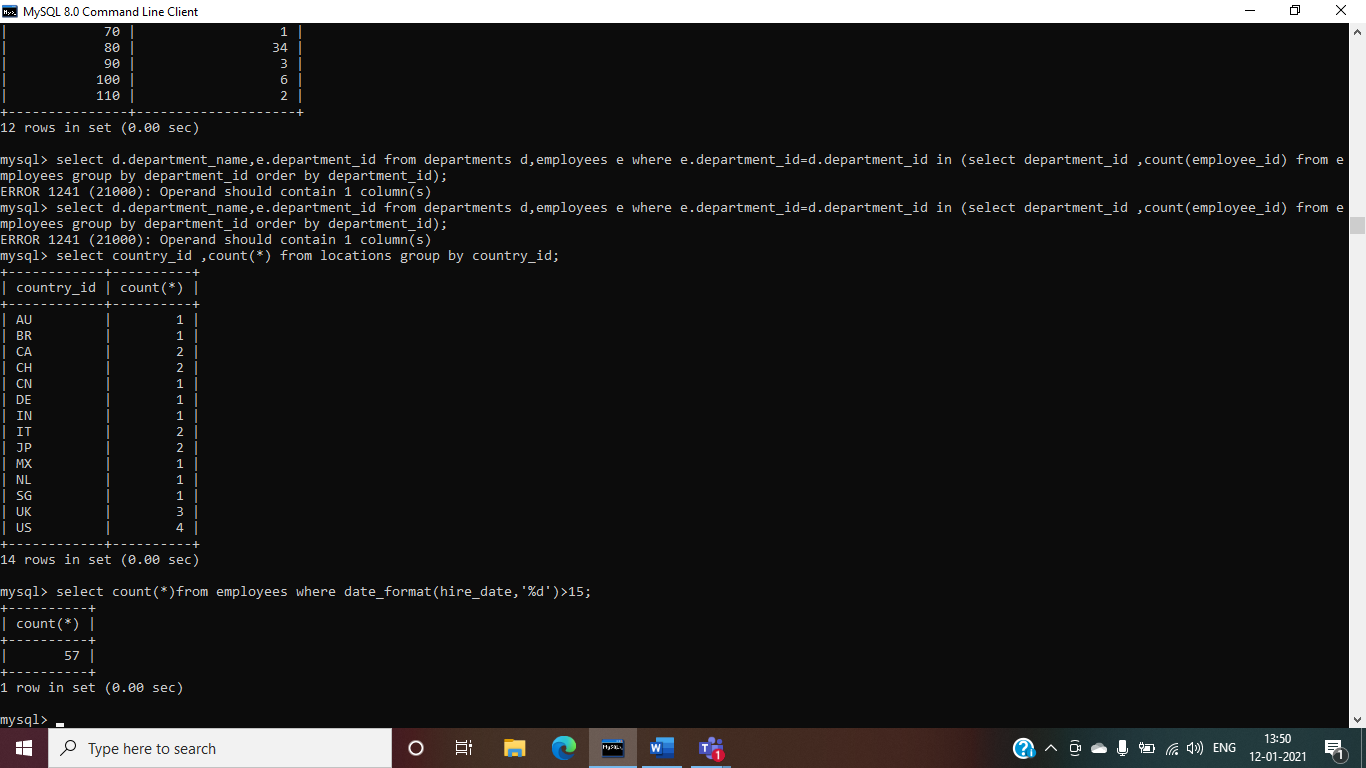
1. Display employee ID and the date on which he ended his previous job.

Ans-select employee\_id ,max(end\_date) from job\_history group by employee\_id;



2. Display number of employees joined after 15th of the month.

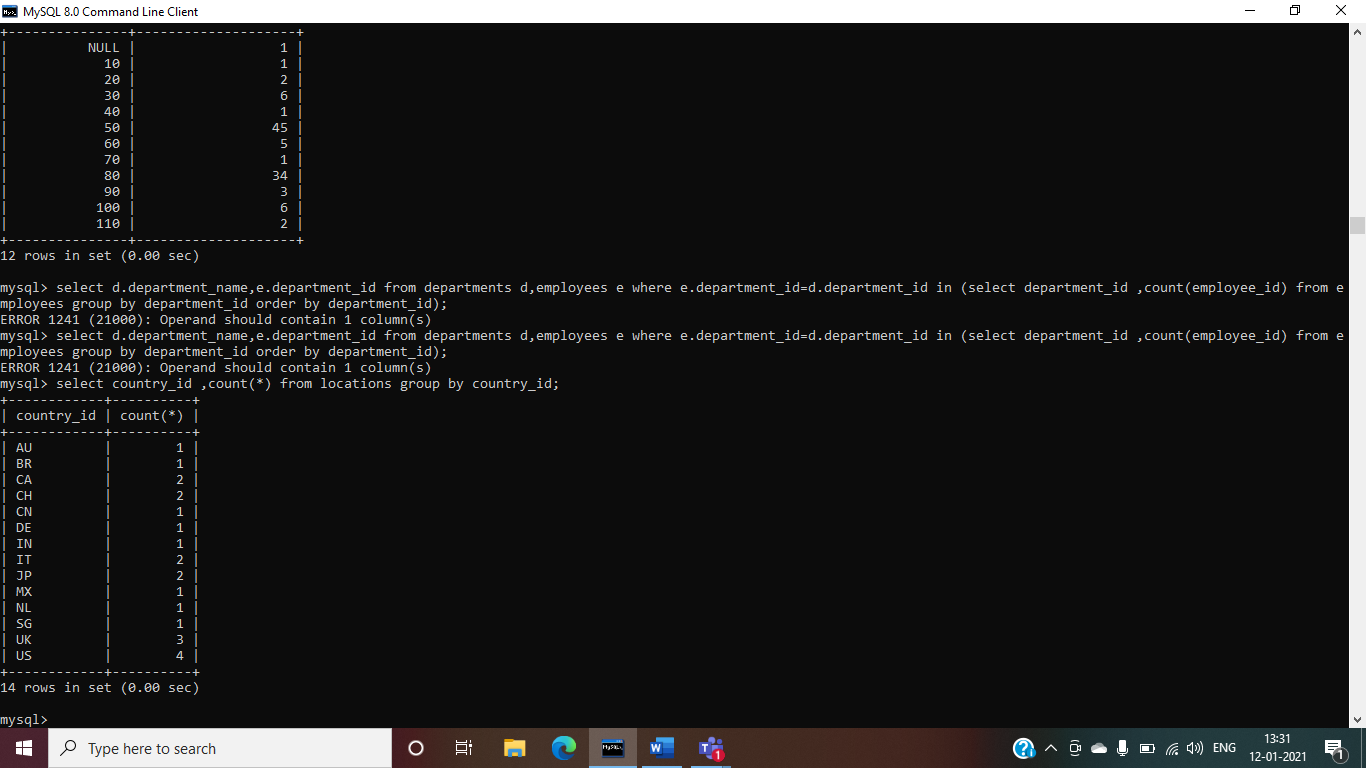
Ans-select count(\*)from employees where date\_format(hire\_date,'%d')>15;



**select with Group by**

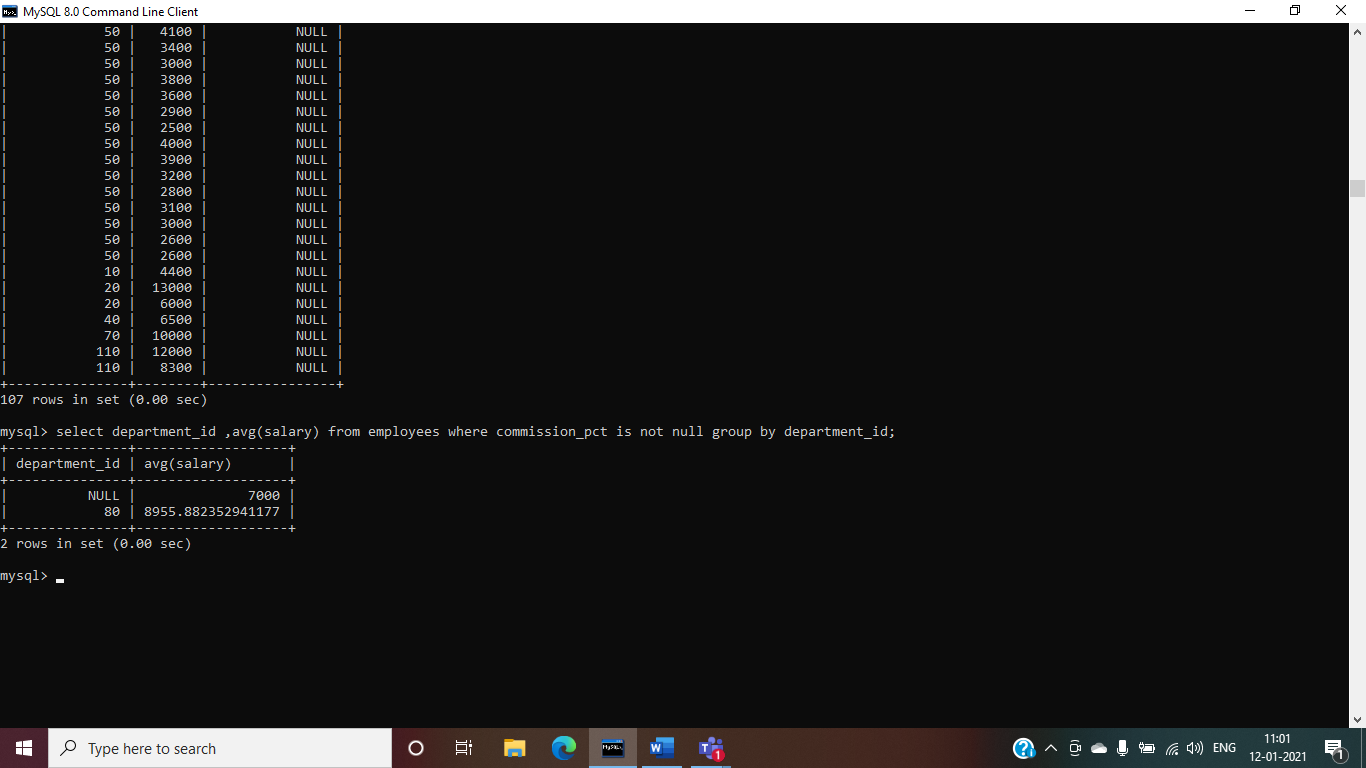
3. Display the country ID and number of cities we have in the country.

Ans-select country\_id ,count(\*) from locations group by country\_id;



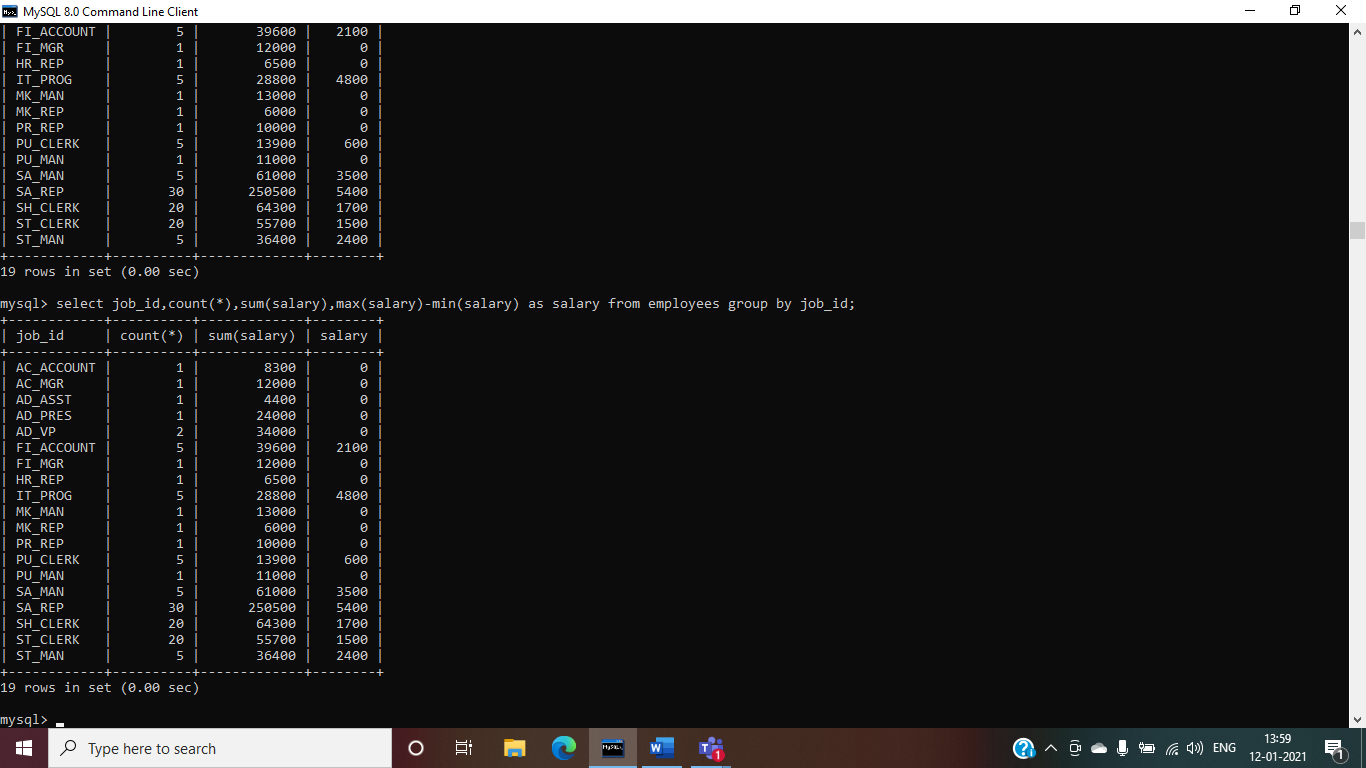
4. Display average salary of employees in each department who have commission percentage.

Ans-select department\_id ,avg(salary) from employees where commission\_pct is not null group by department\_id;



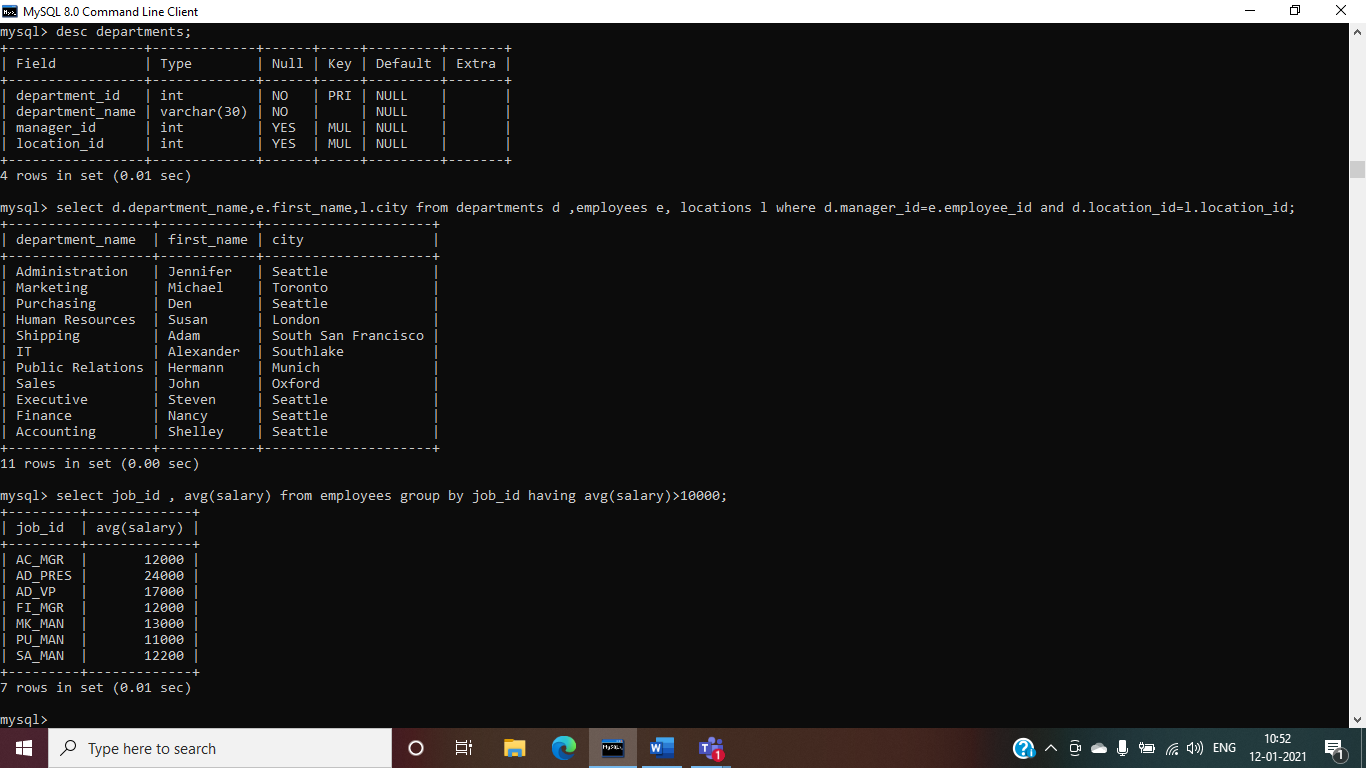
5. Display job ID, number of employees, sum of salary, and difference between highest salary and lowest salary of the employees of the job.

Ans-select job\_id,count(\*),sum(salary),max(salary)-min(salary) as salary from employees group by job\_id;



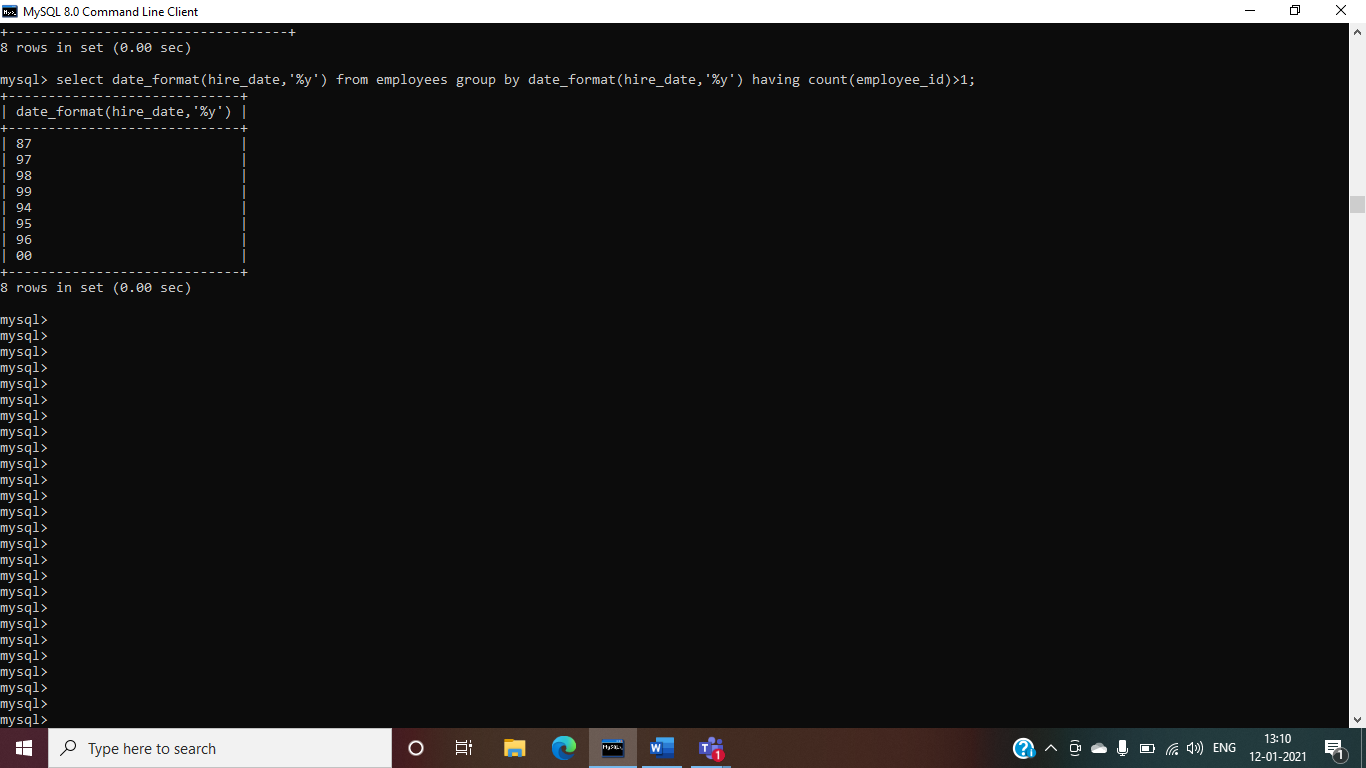
6. Display job ID for jobs with average salary more than 10000.

Ans-select job\_id , avg(salary) from employees group by job\_id having avg(salary)>10000;



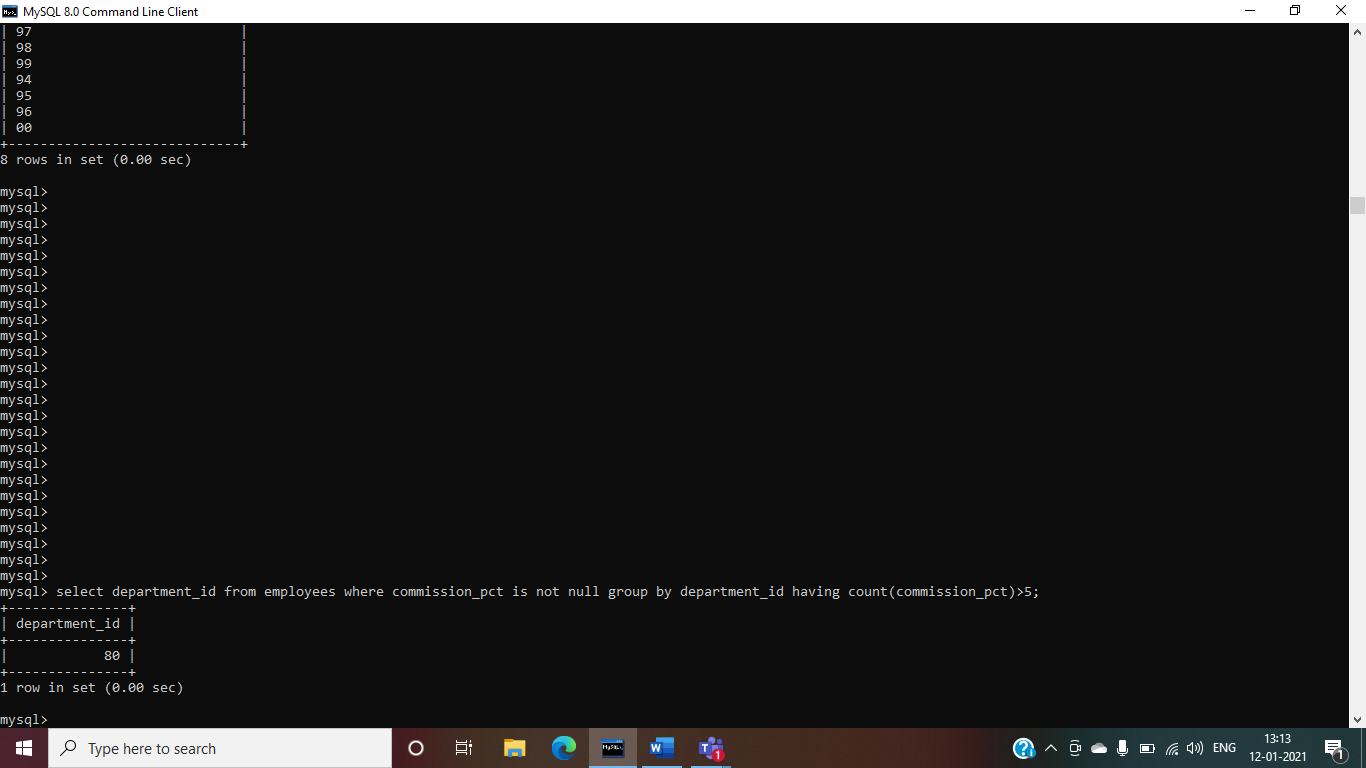
7. Display years in which more than 10 employees joined.

Ans-select date\_format(hire\_date,'%y') from employees group by date\_format(hire\_date,'%y') having count(employee\_id)>1;



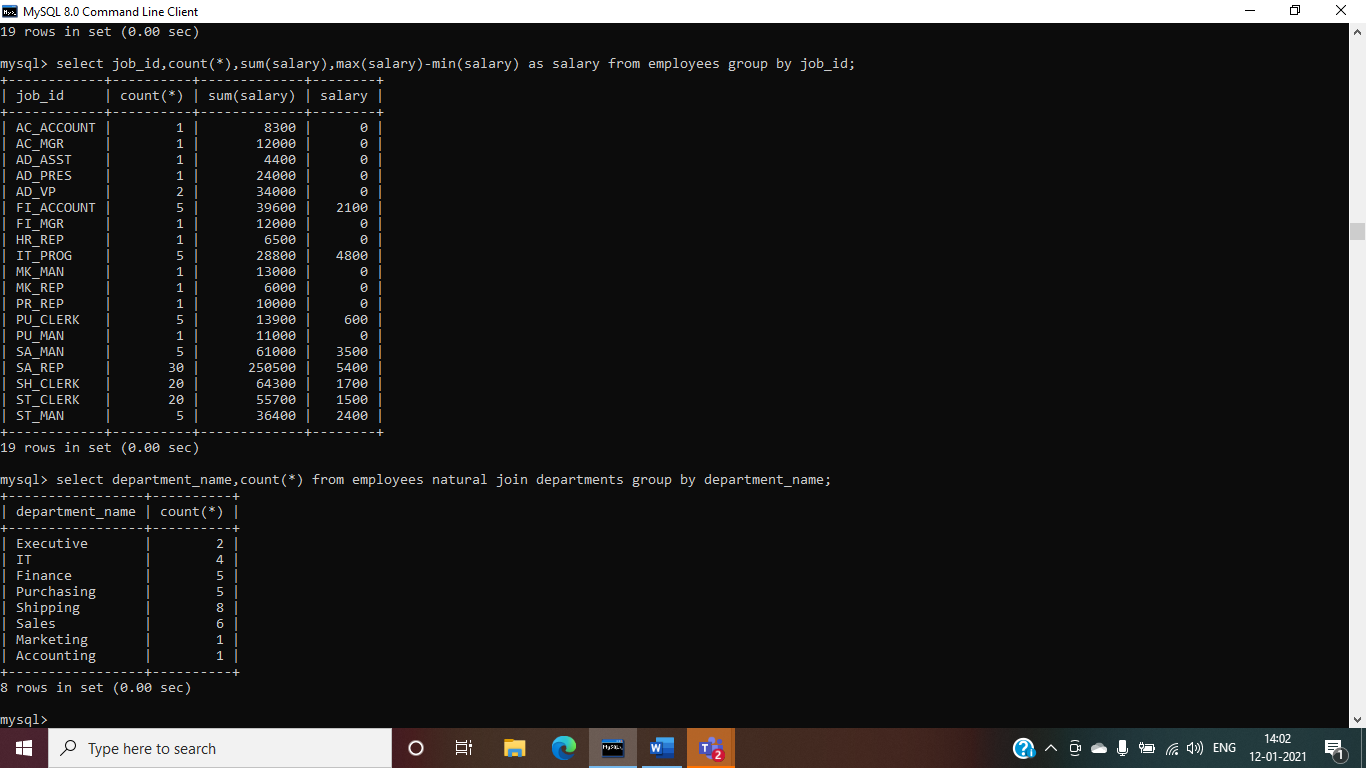
8. Display departments in which more than five employees have commission percentage.

Ans-select department\_id from employees where commission\_pct is not null group by department\_id having count(commission\_pct)>5;



9. Display department name and number of employees in the department.

Ans-select department\_name,count(\*) from employees natural join departments group by department\_name;



10. Display employee ID for employees who did more than one job in the past.

Ans-select employee\_id from job\_history group by employee\_id having count(\*)>1;

