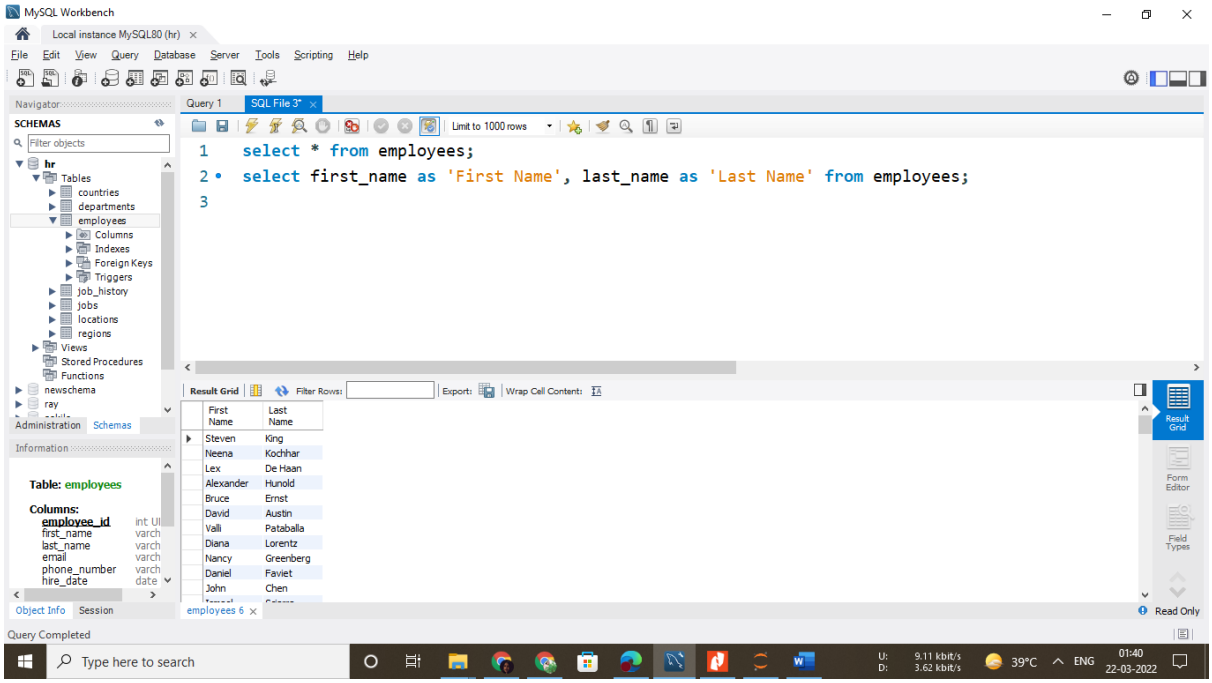
SQL ASSIGNMENT 1

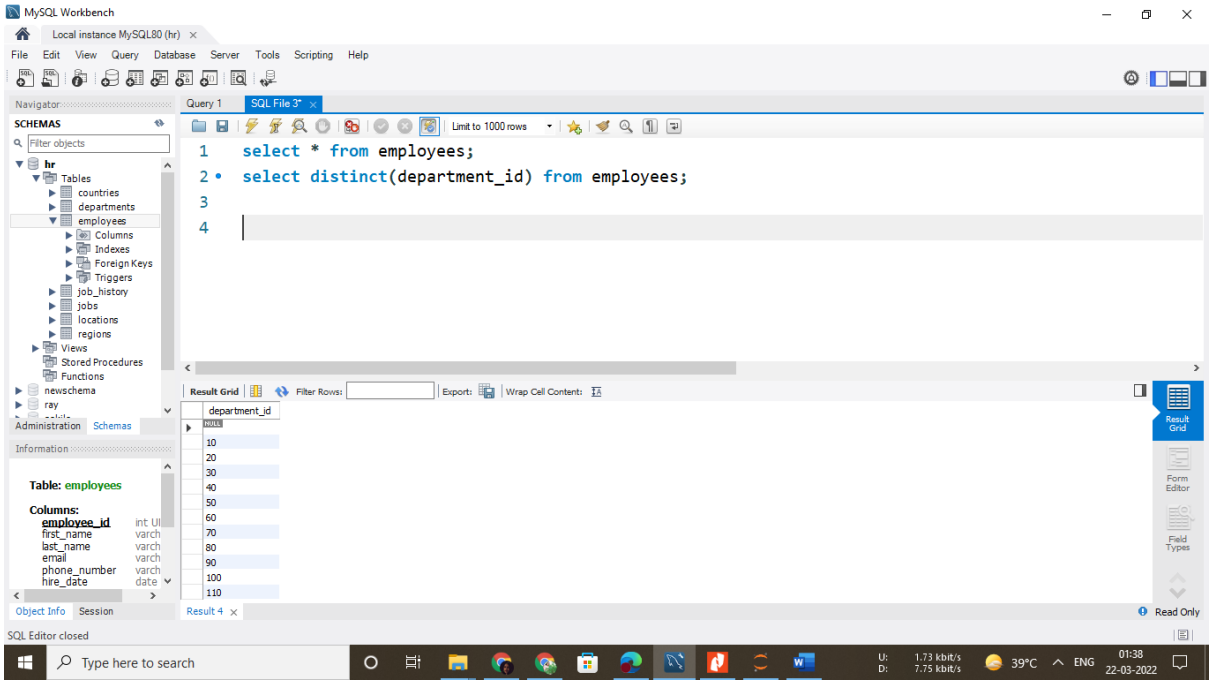
1. Write a query to display the names (first_name, last_name) using alias name “First Name", "Last Name".

select first_name as 'First Name', last_name as 'Last Name' from employees;

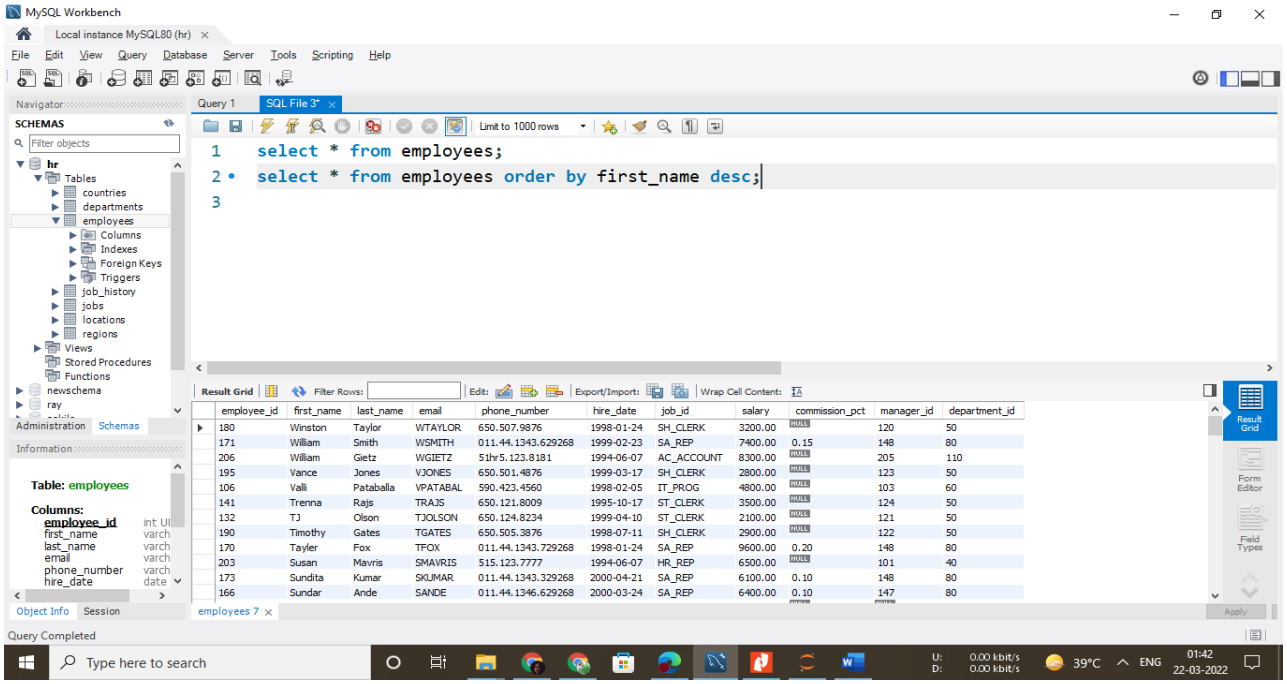


2. Write a query to get unique department ID from employee table

select distinct(department_id) from employees;

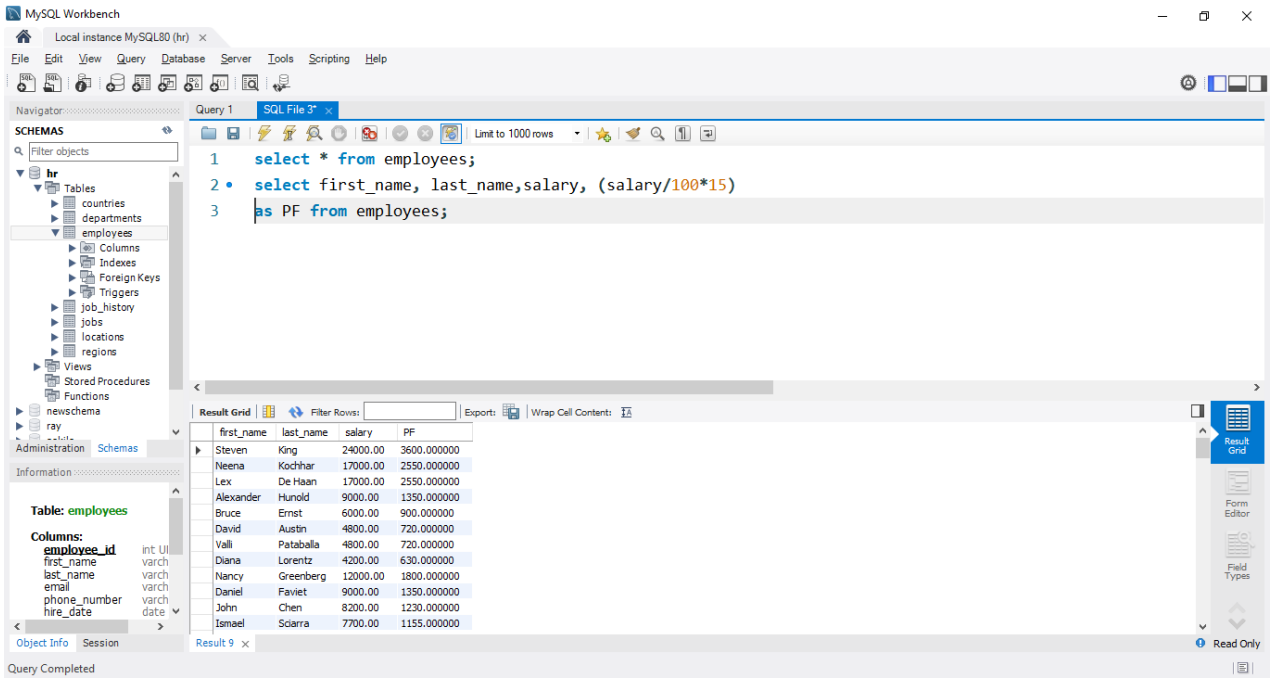


3. Write a query to get all employee details from the employee table order by first name, descending
select * from employees order by first_name desc;



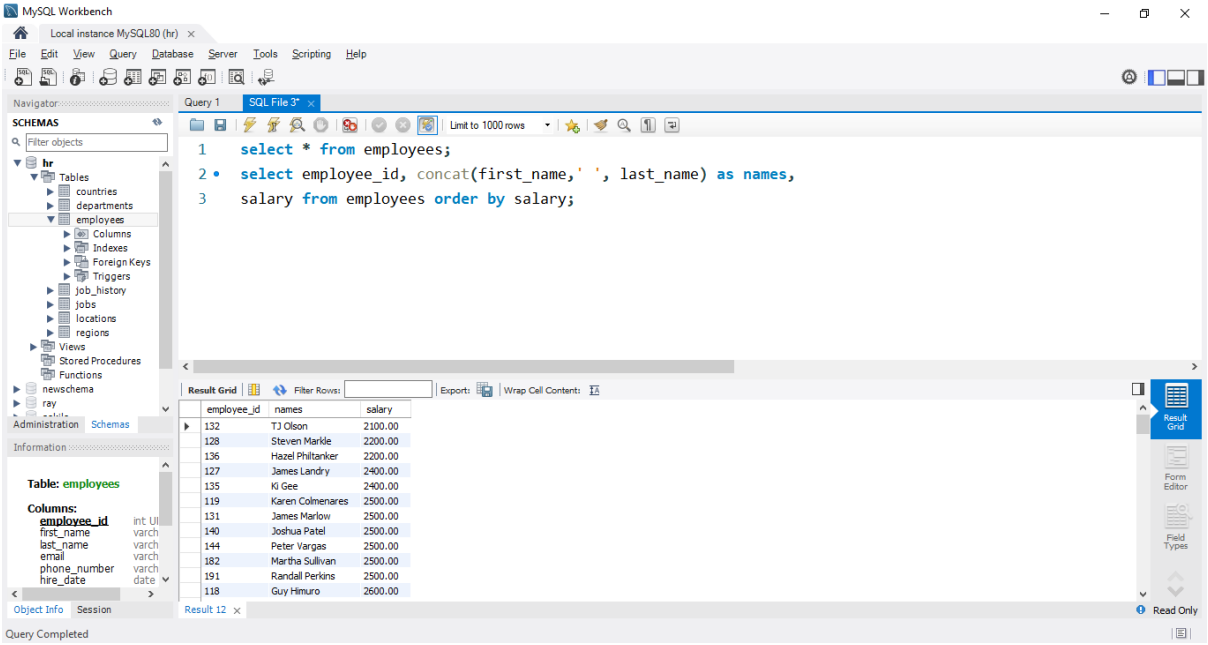
4. Write a query to get the names (first_name, last_name), salary, PF of all the employees (PF is calculated as 15% of salary)

select first_name, last_name,salary, (salary/100*15) as PF from employees;

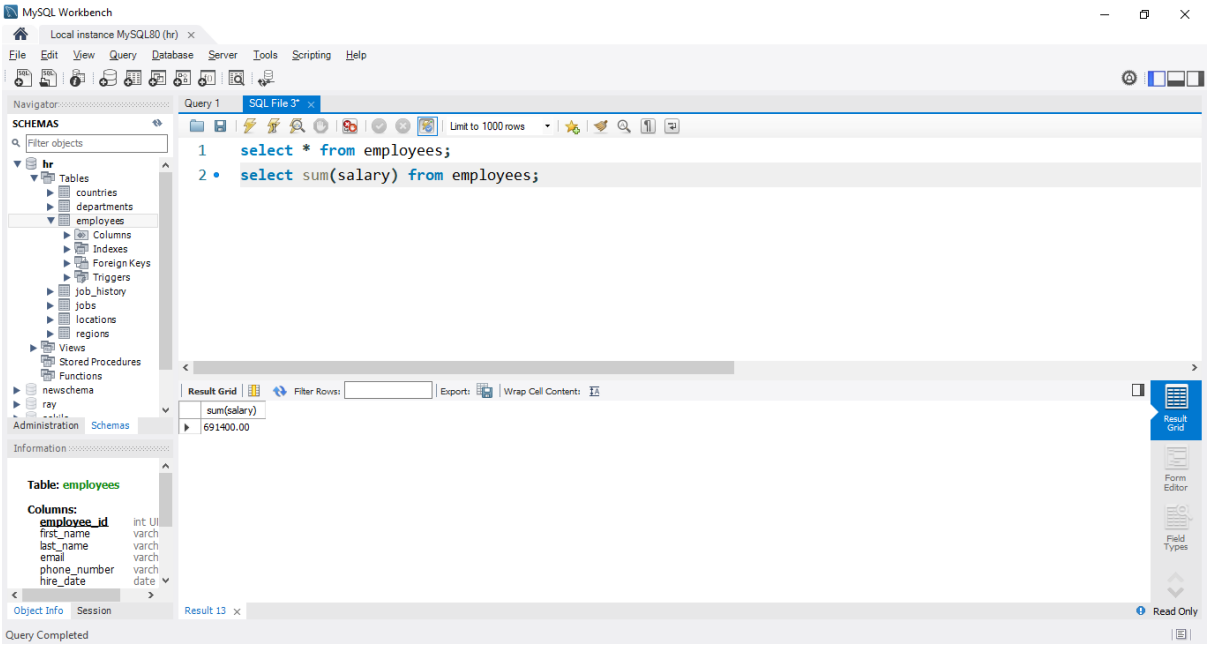


5. Write a query to get the employee ID, names (first_name, last_name), salary in ascending order of salary.

select employee_id, concat(first_name,' ', last_name) as names,
salary from employees order by salary;

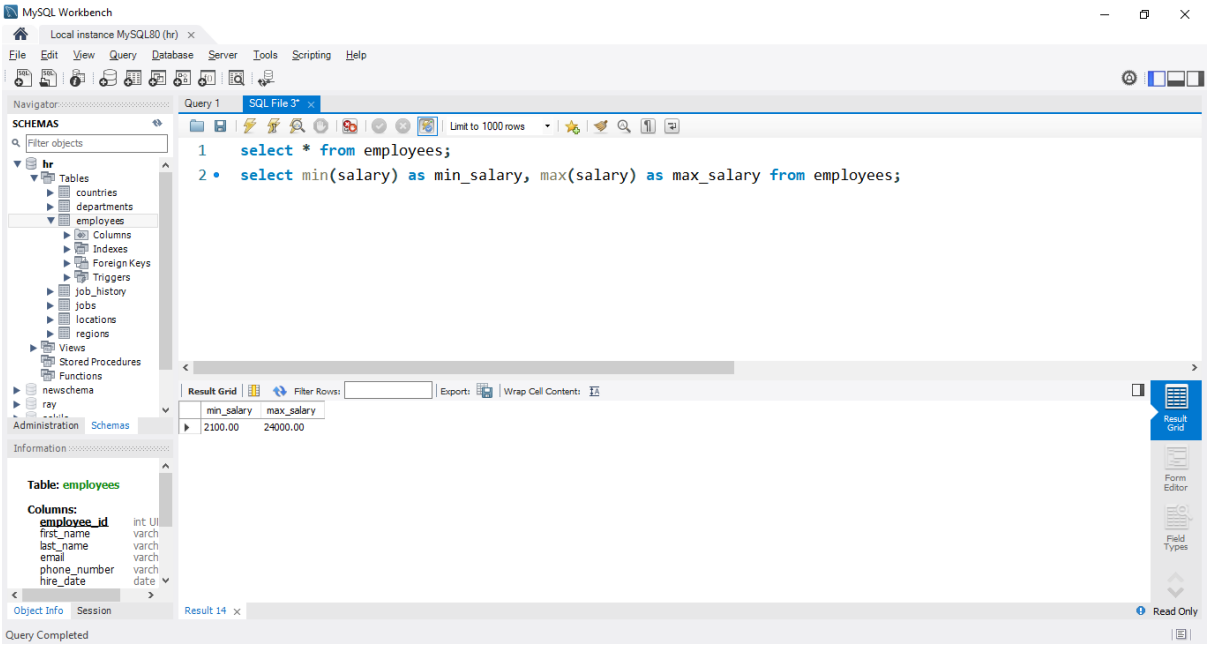


6. Write a query to get the total salaries payable to employees
select sum(salary) from employees;



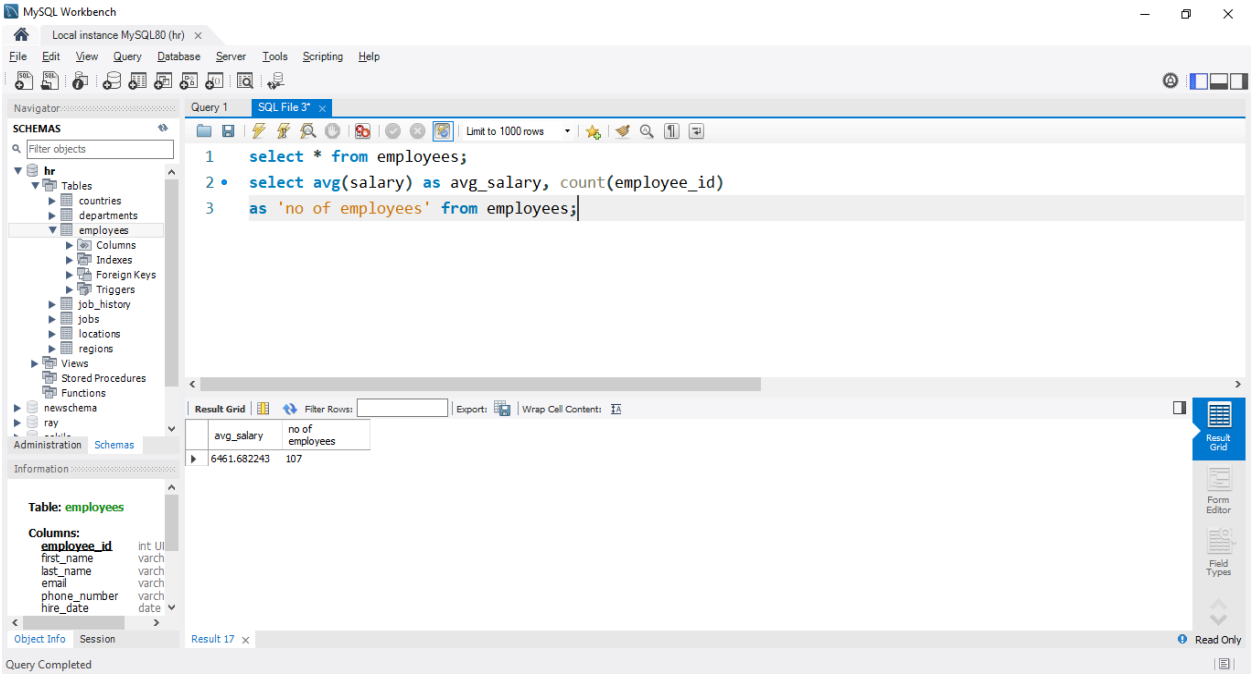
7. Write a query to get the maximum and minimum salary from employees table

```
select min(salary) as min_salary, max(salary) as max_salary from employees;
```



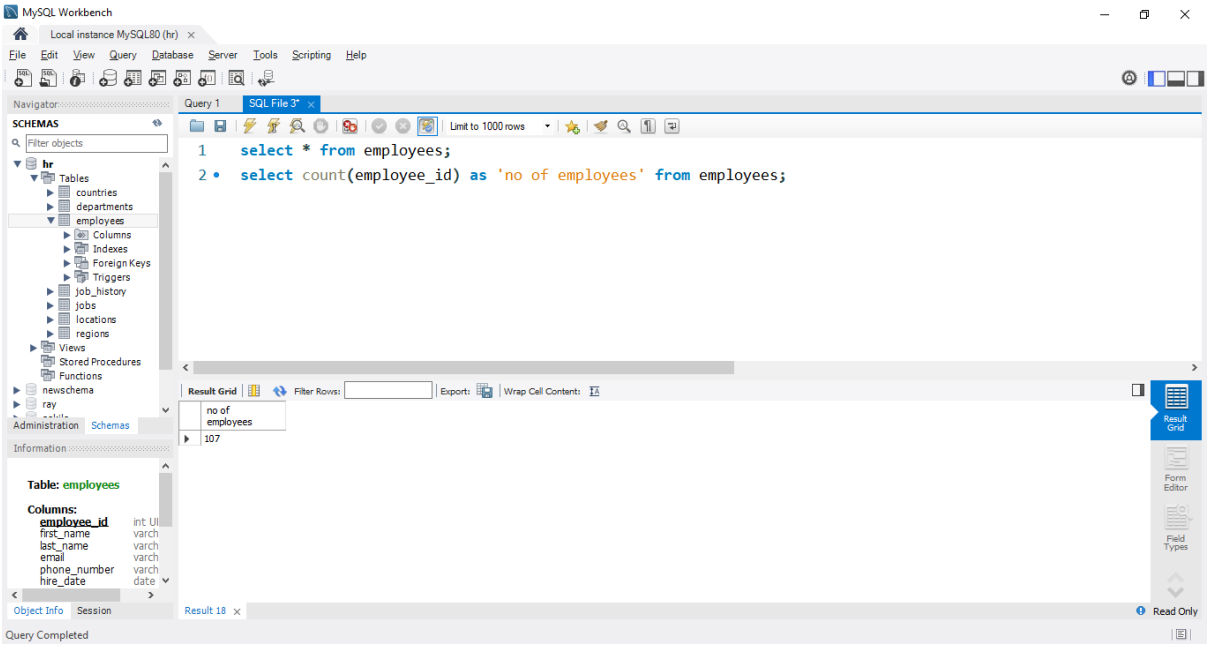
8. Write a query to get the average salary and number of employees in the employees table.

```
select avg(salary) as avg_salary, count(employee_id)
as 'no of employees' from employees;
```



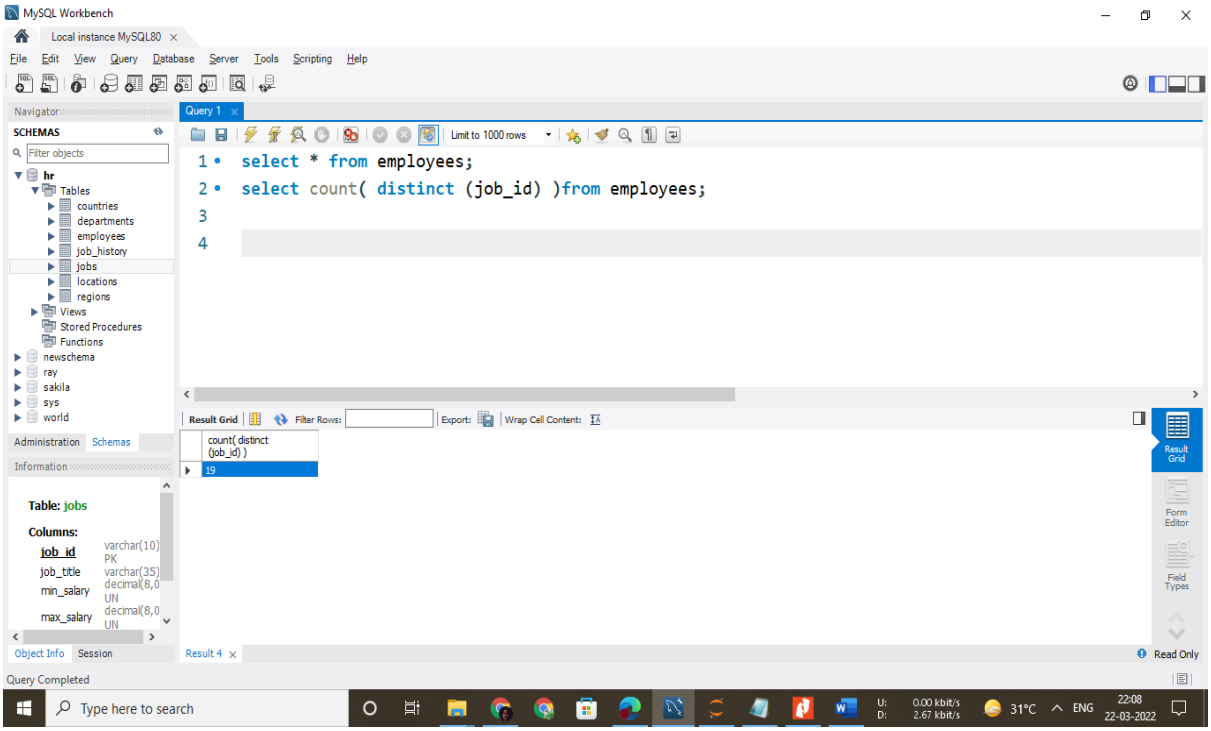
9. Write a query to get the number of employees working with the company

```
select count(employee_id) as 'no of employees' from employees;
```



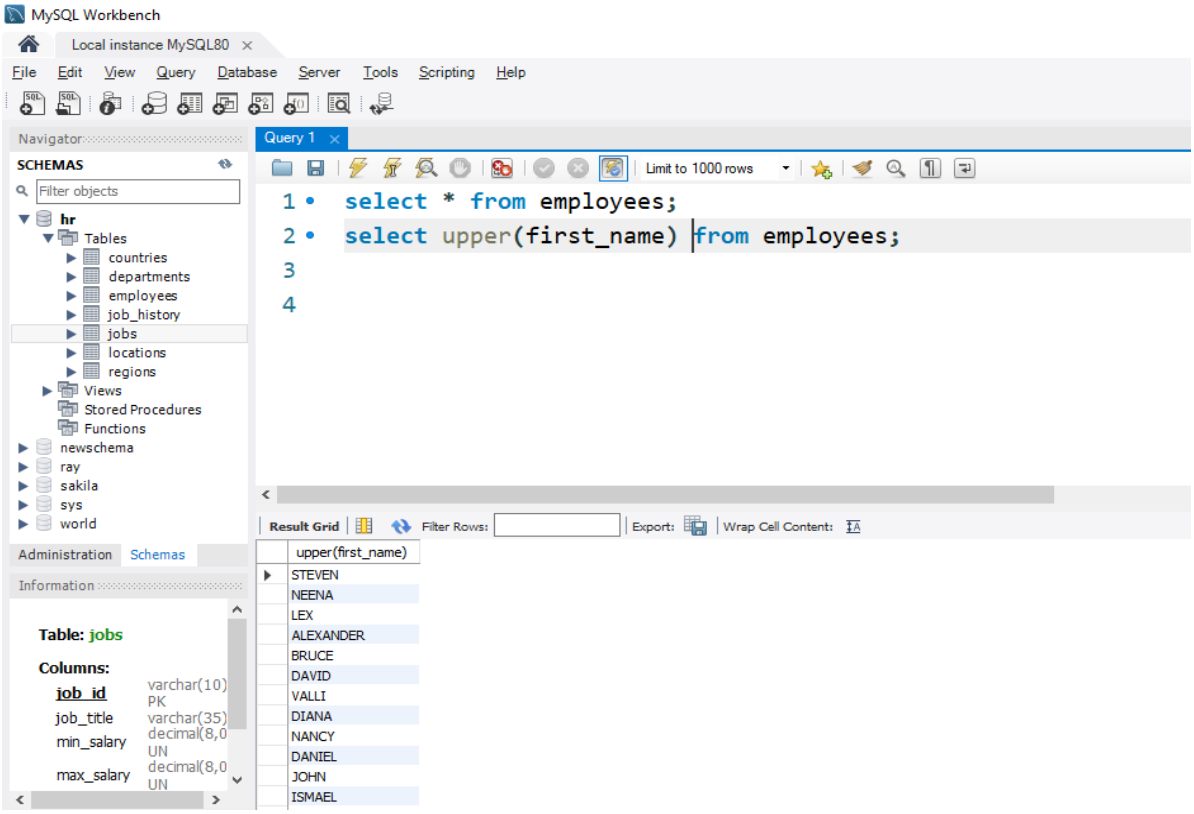
10. Write a query to get the number of jobs available in the employees table .

```
select count( distinct (job_id) )from employees;
```



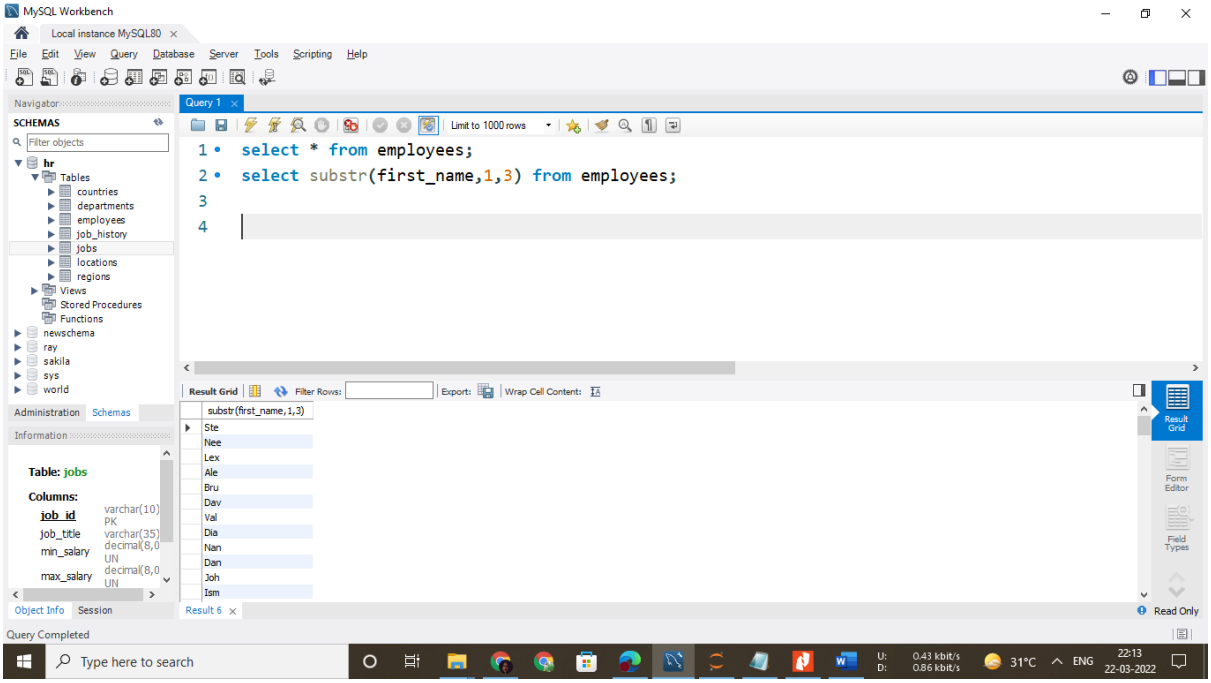
11. Write a query get all first name from employees table in upper case

```
select upper(first_name) from employees;
```

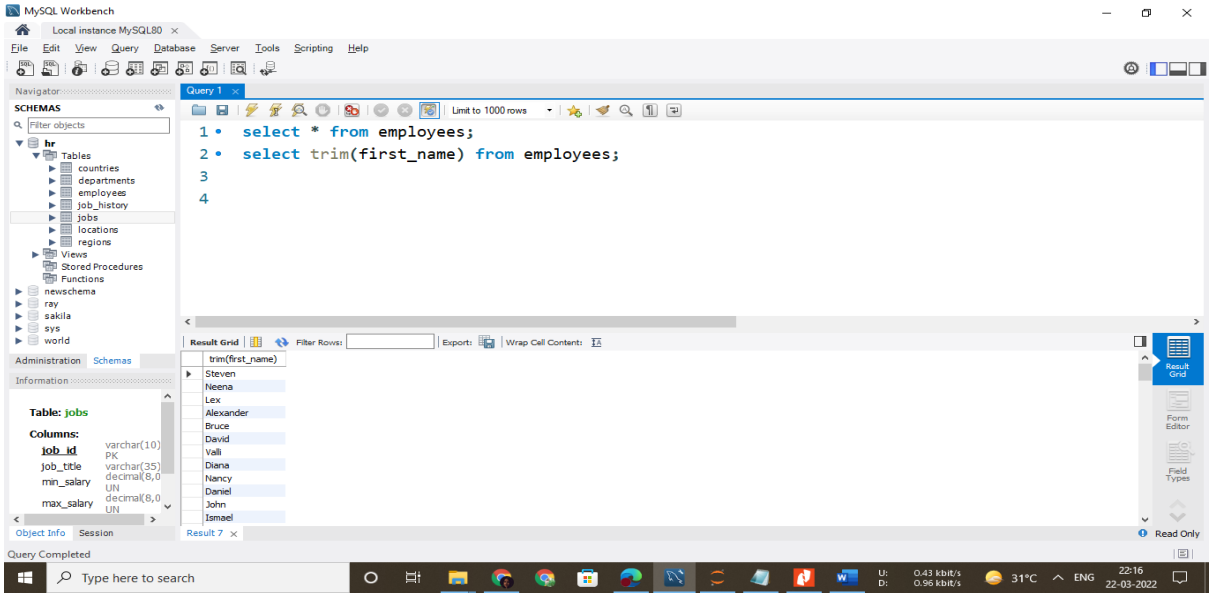


12. Write a query to get the first 3 characters of first name from employees table

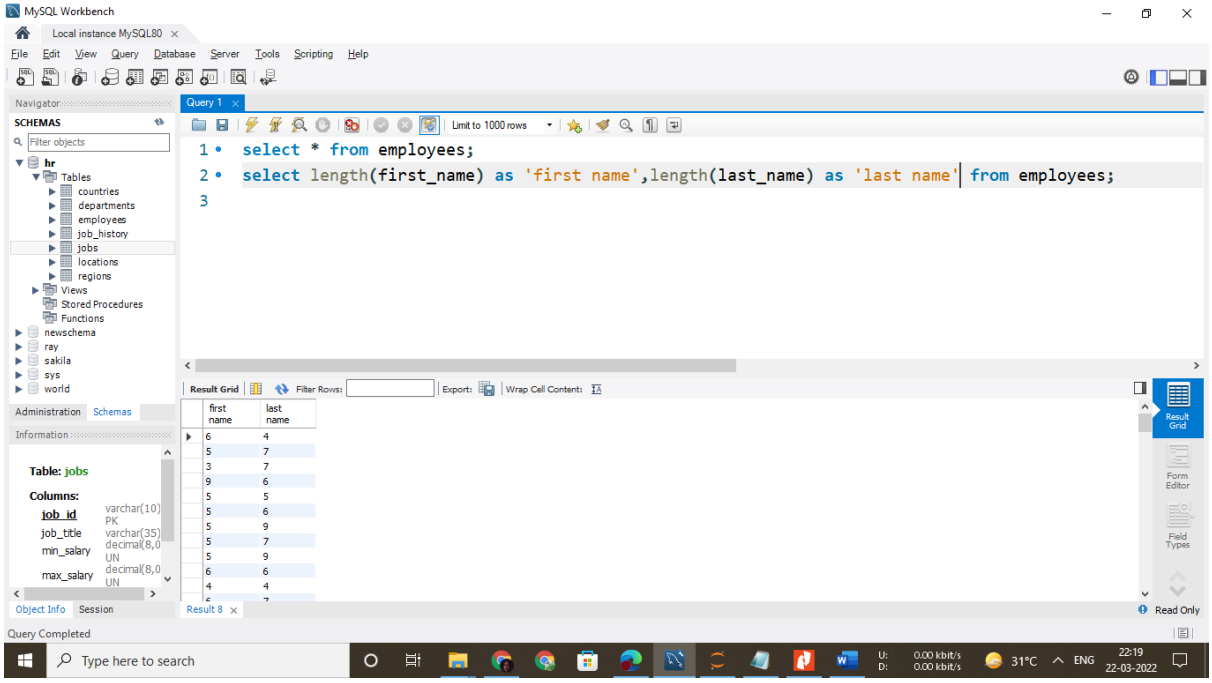
```
select substr(first_name,1,3) from employees;
```



13. Write a query to get first name from employees table after removing white spaces from both side
select trim(first_name) from employees;

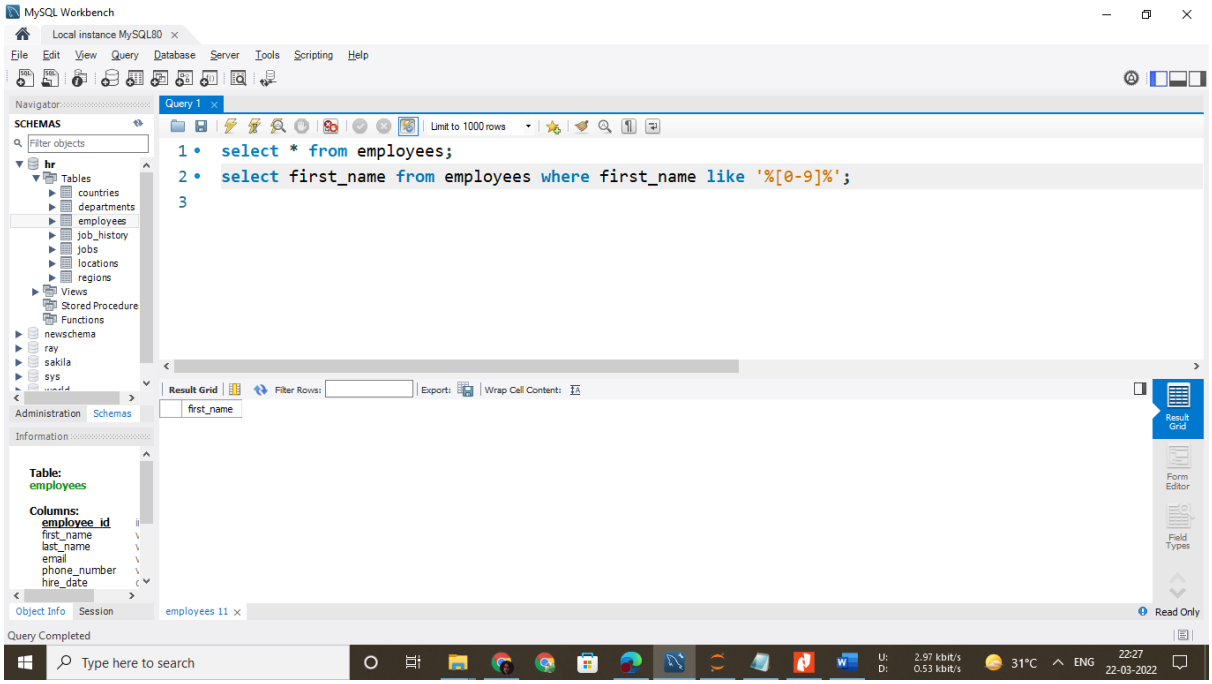


14. Write a query to get the length of the employee names (first_name, last_name) from employees table
select length(first_name) as 'first name',length(last_name) as 'last name' from employees;



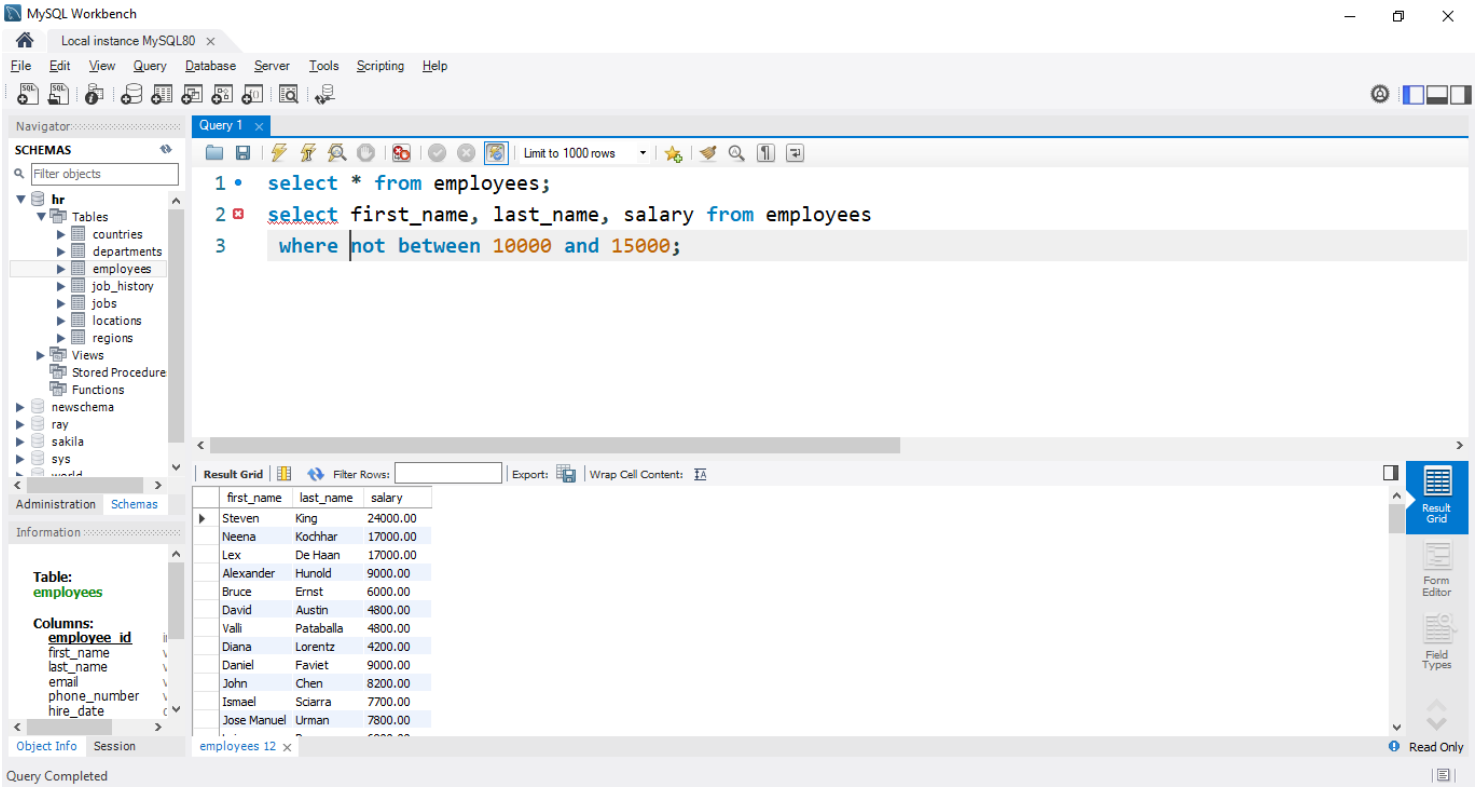
15. Write a query to check if the first_name fields of the employees table contains numbers.

```
select first_name from employees where first_name like '%[0-9]%';
```



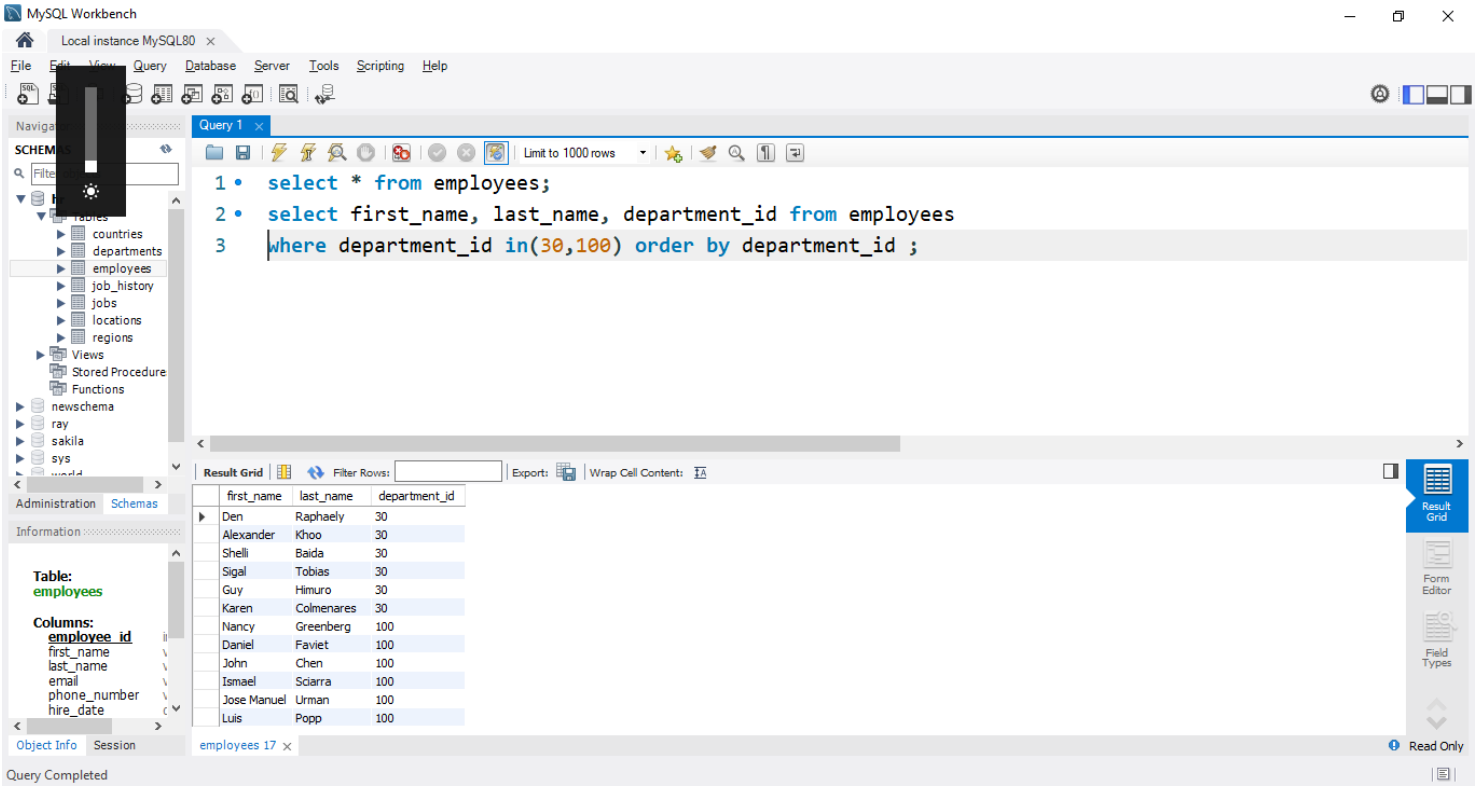
16. Write a query to display the name (first_name, last_name) and salary for all employees whose salary is not in the range $10,000 through $15,000.

```
select first_name, last_name, salary from employees where not between 10000 and 15000;
```



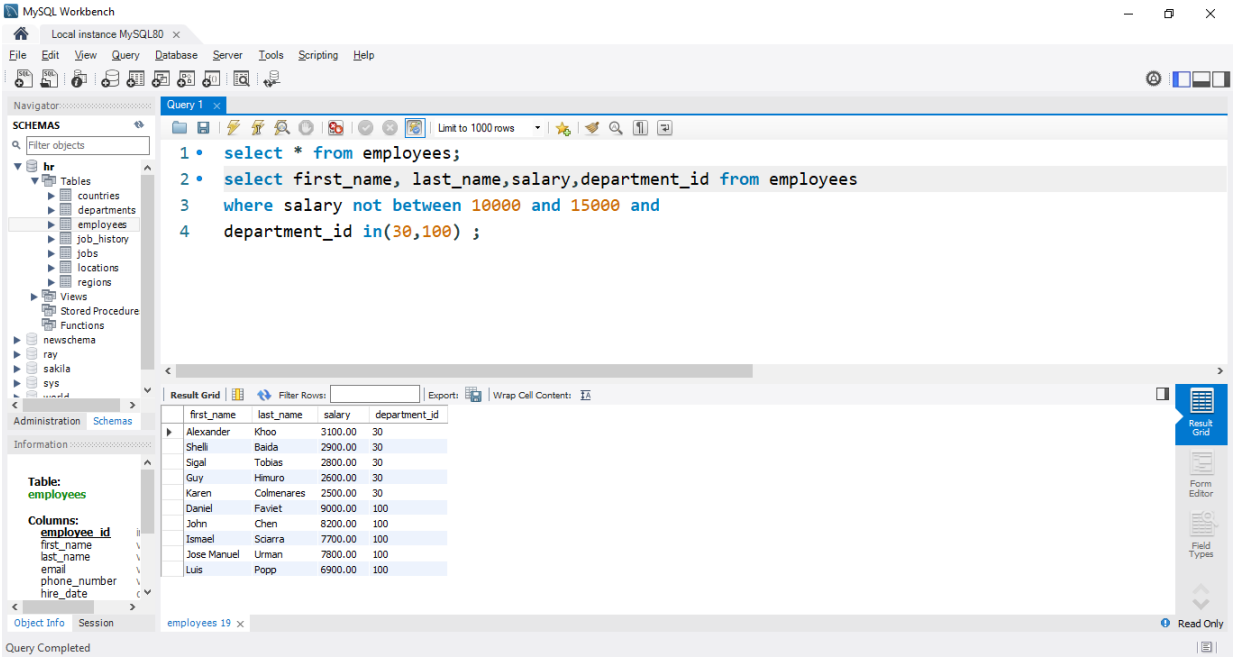
17. Write a query to display the name (first_name, last_name) and department ID of all employees in departments 30 or 100 in ascending order

```
select first_name, last_name, department_id from employees
where department_id in(30,100) order by department_id ;
```



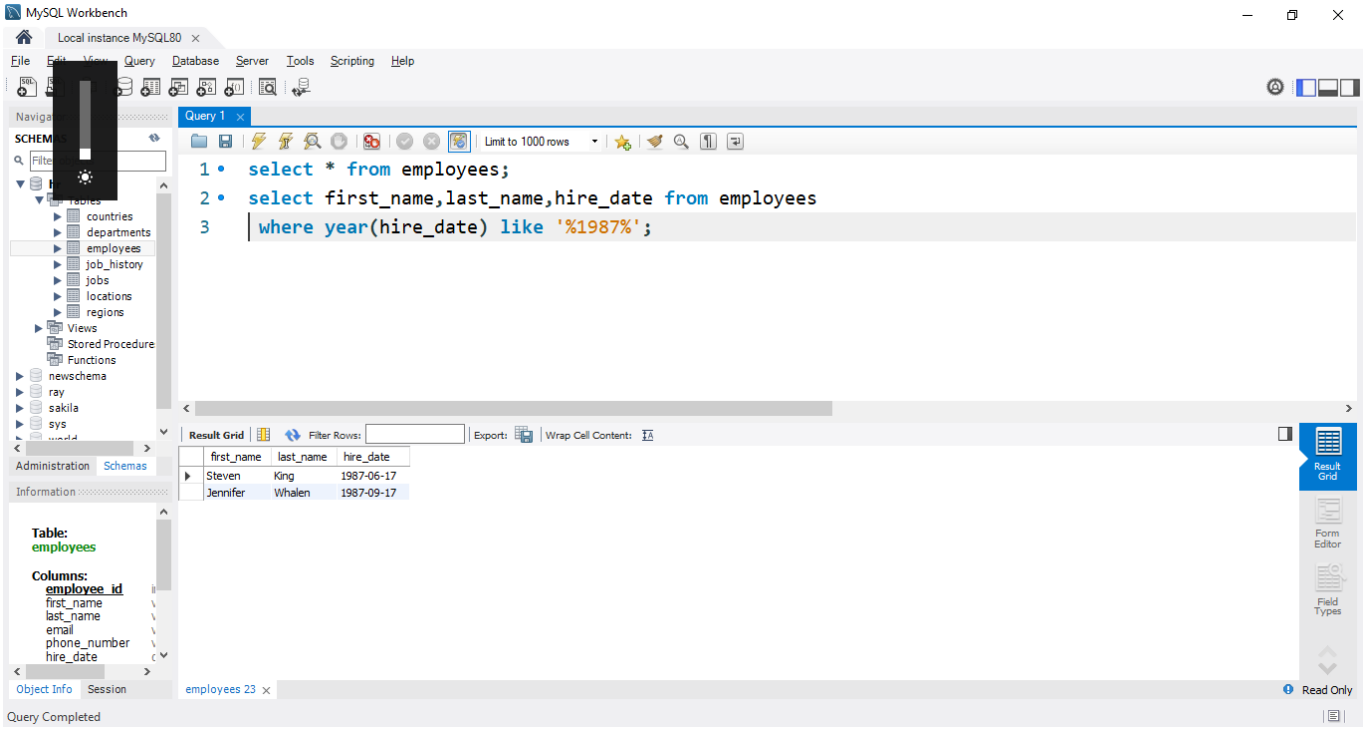
18. Write a query to display the name (first_name, last_name) and salary for all employees whose salary is not in the range $10,000 through $15,000 and are in department 30 or 100

```
select first_name, last_name,salary,department_id from employees where salary not between 10000 and 15000
and
department_id in(30,100) ;
```



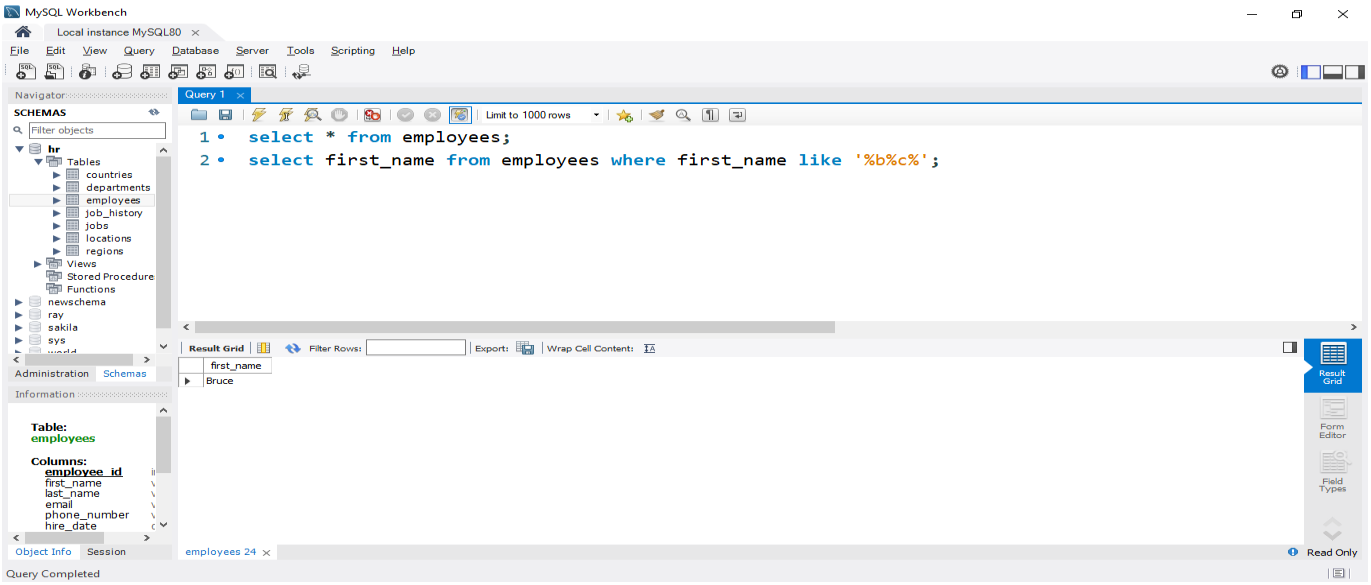
19. Write a query to display the name (first_name, last_name) and hire date for all employees who were hired in 1987.

select first_name,last_name,hire_date from employees where year(hire_date) like '%1987%';

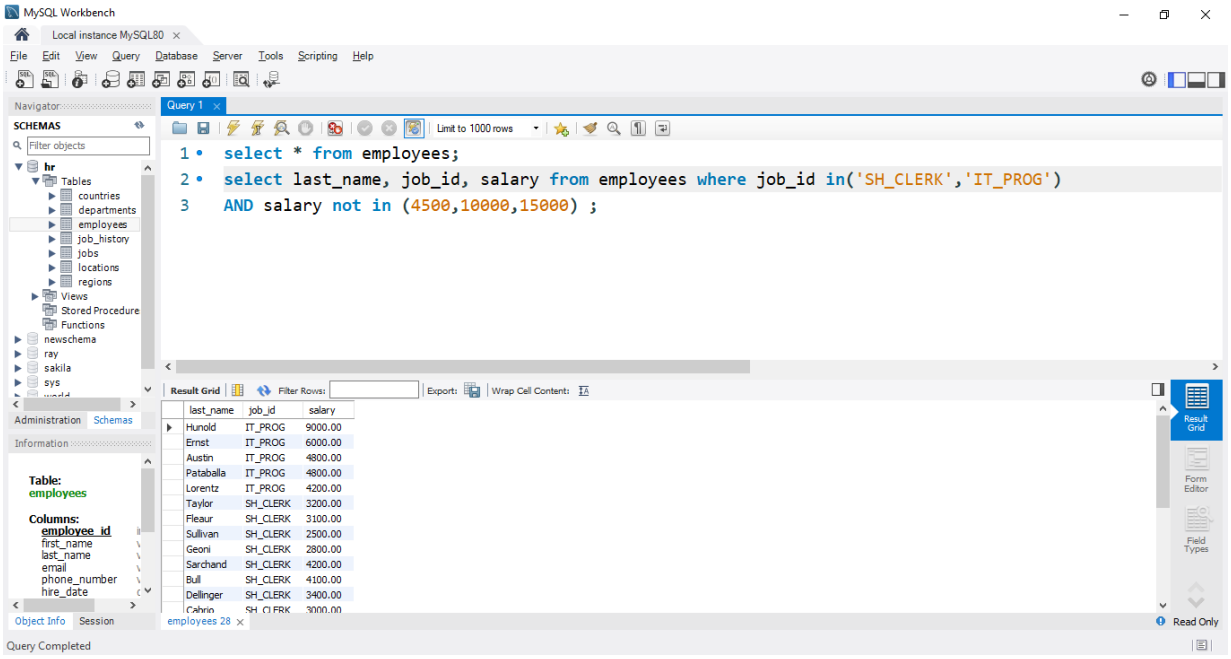


20. Write a query to display the first_name of all employees who have both "b" and "c" in their first name

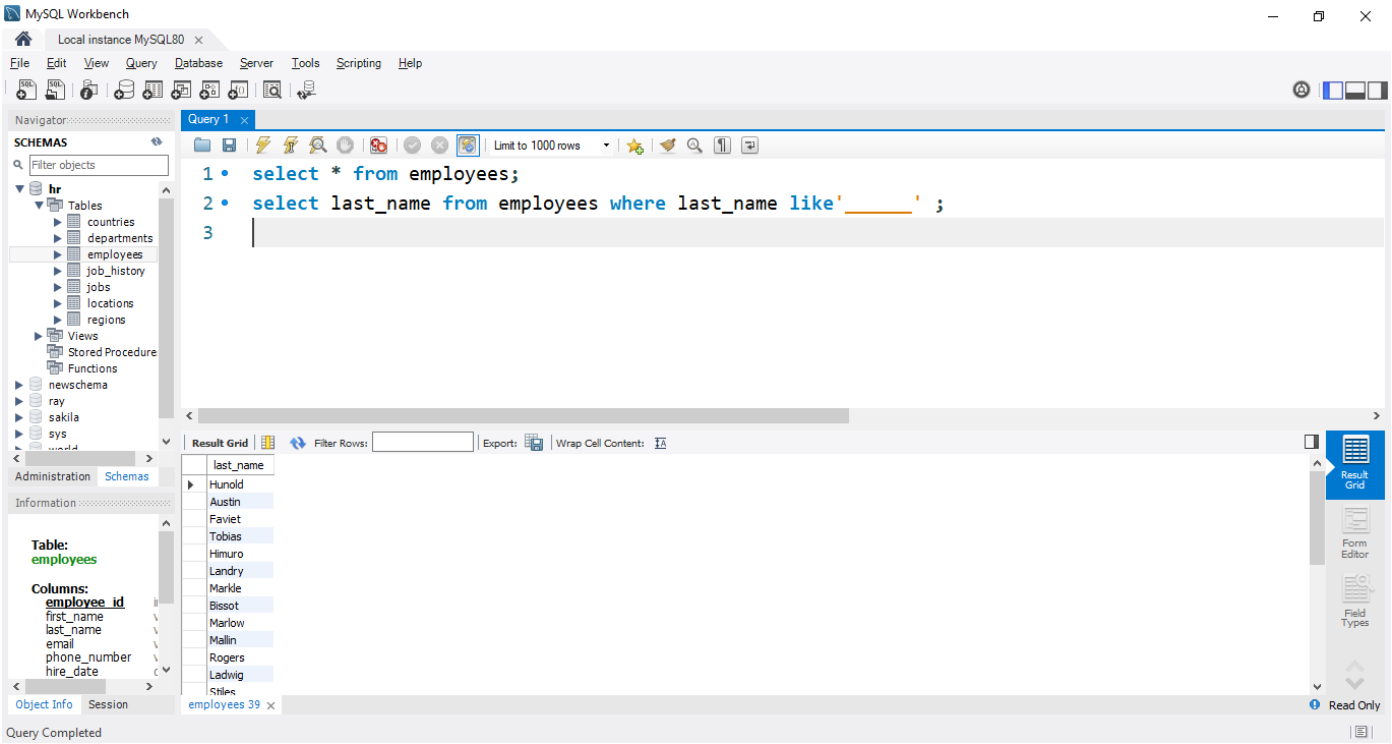
select first_name from employees where first_name like '%b%c%';



21. Write a query to display the last name, job, and salary for all employees whose job is that of a Programmer or a Shipping Clerk, and whose salary is not equal to $4,500, $10,000, or $15,000

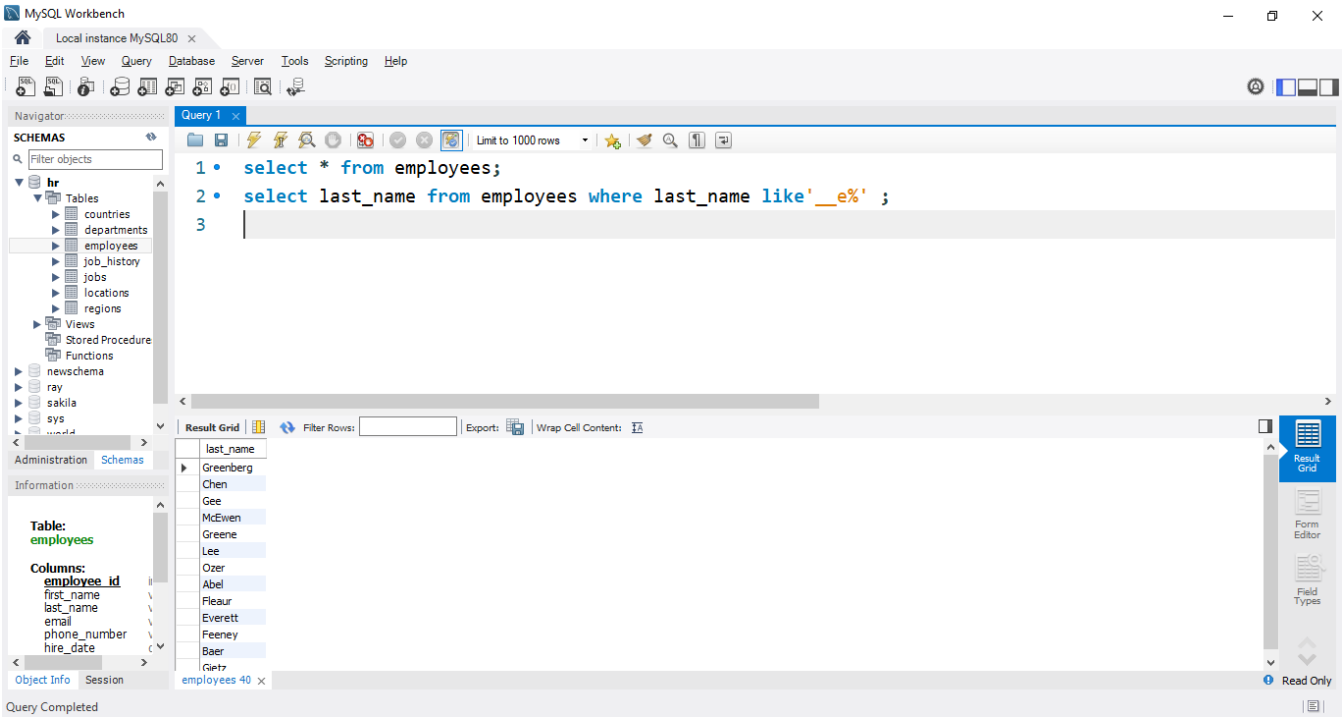


22. Write a query to display the last name of employees whose names have exactly 6 characters
select last_name from employees where last_name like' ' ;



23. Write a query to display the last name of employees having 'e' as the third character

```
select last_name from employees where last_name like'__e%' ;
```



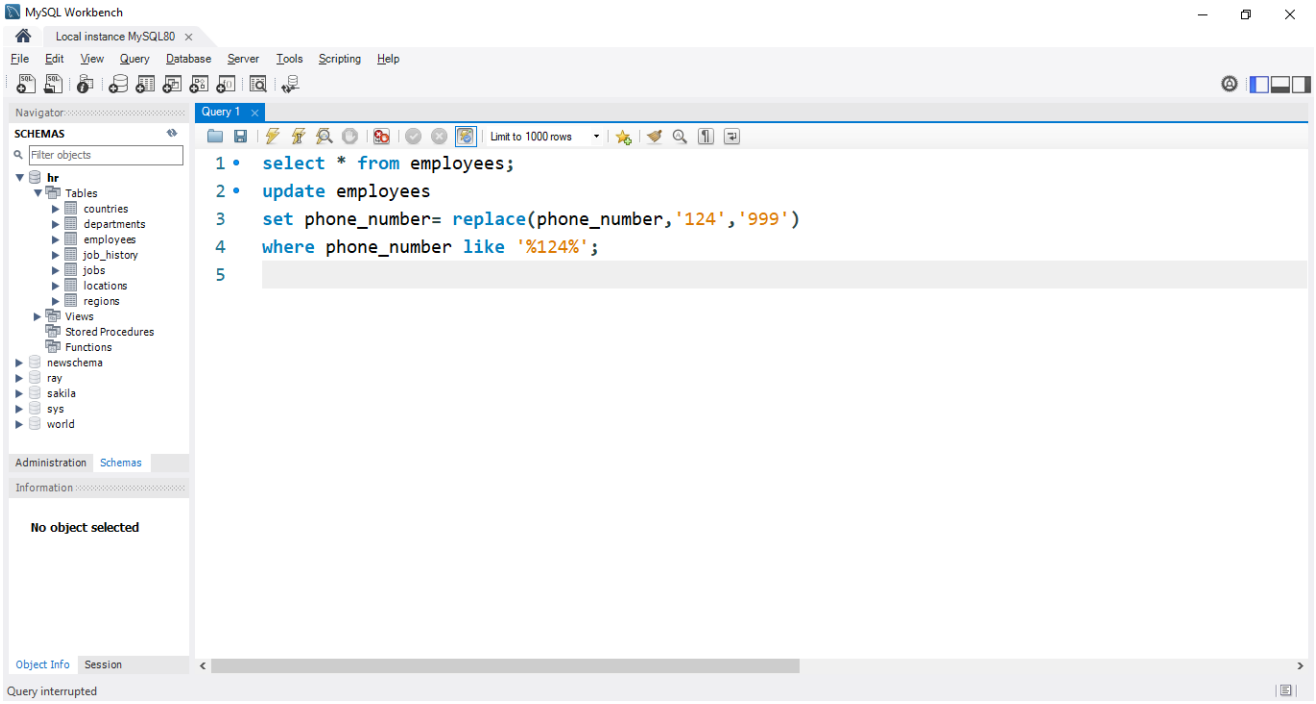
24. Write a query to get the job_id and related employee's id

Partial output of the query :

job_id	Employees ID
AC_ACCOUNT	206
AC_MGR	205
AD_ASST	200
AD_PRES	100
AD_VP	101 ,102
FI_ACCOUNT	110 ,113 ,111 ,109 ,112

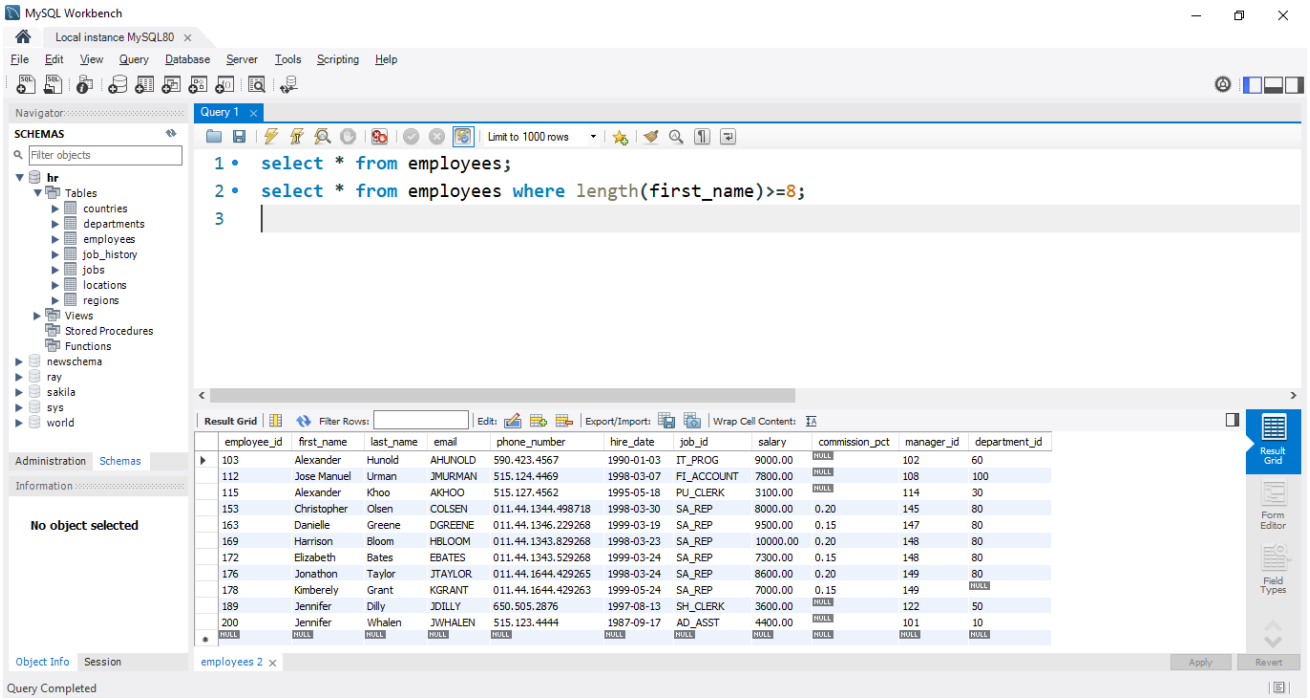
```
select job_id, group_concat(employee_id) as emp_id
from employees group by job_id ;
```

25. Write a query to update the portion of the phone_number in the employees table, within the phone number the substring '124' will be replaced by '999'



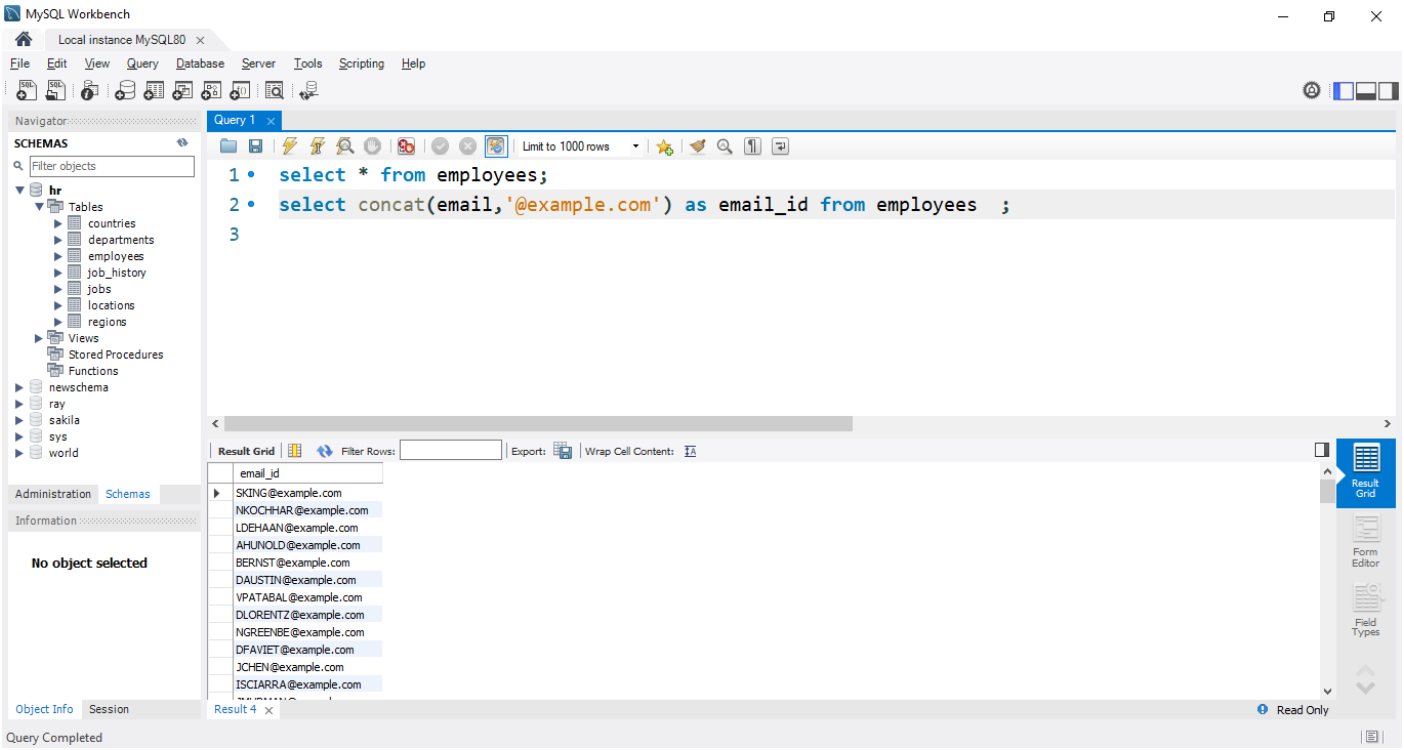
26. Write a query to get the details of the employees where the length of the first name greater than or equal to 8

select * from employees where length(first_name)>=8;



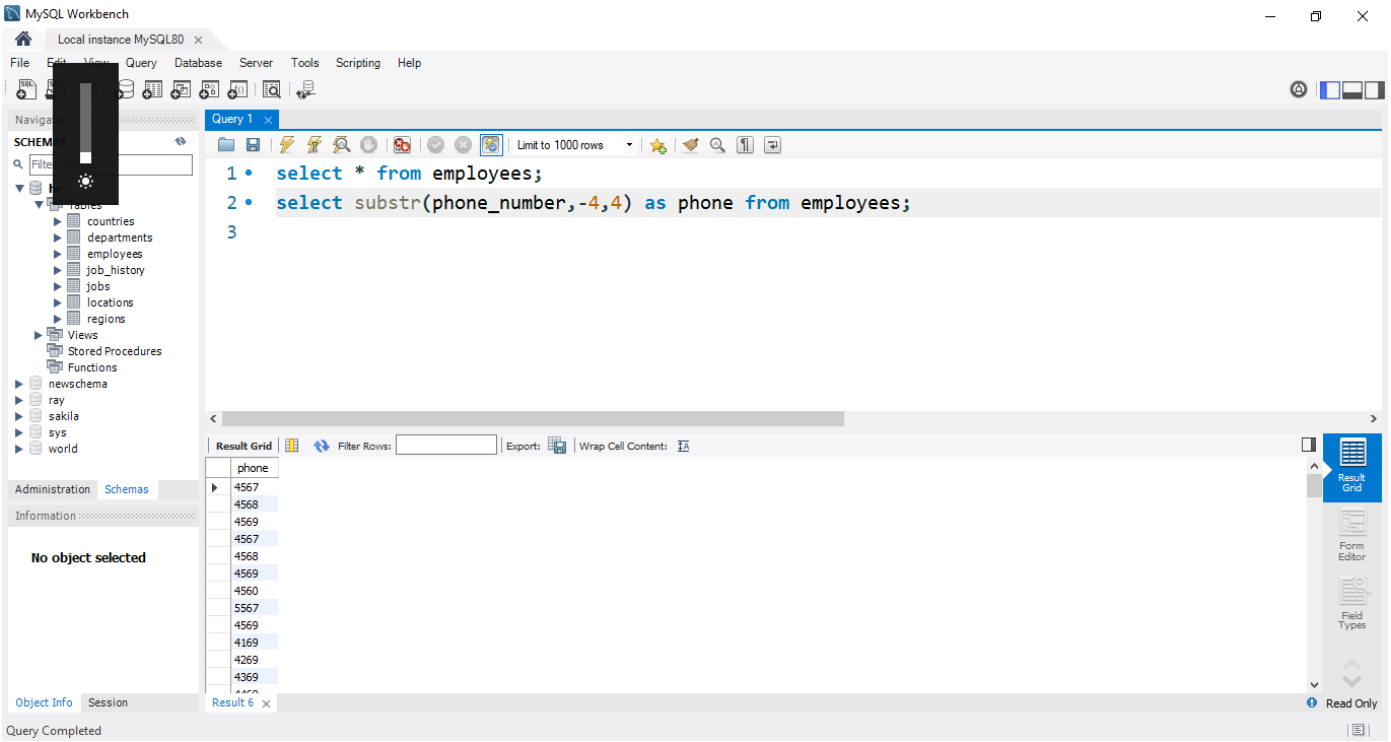
27. Write a query to append '@example.com' to email field

select concat(email,'@example.com') as email_id from employees;



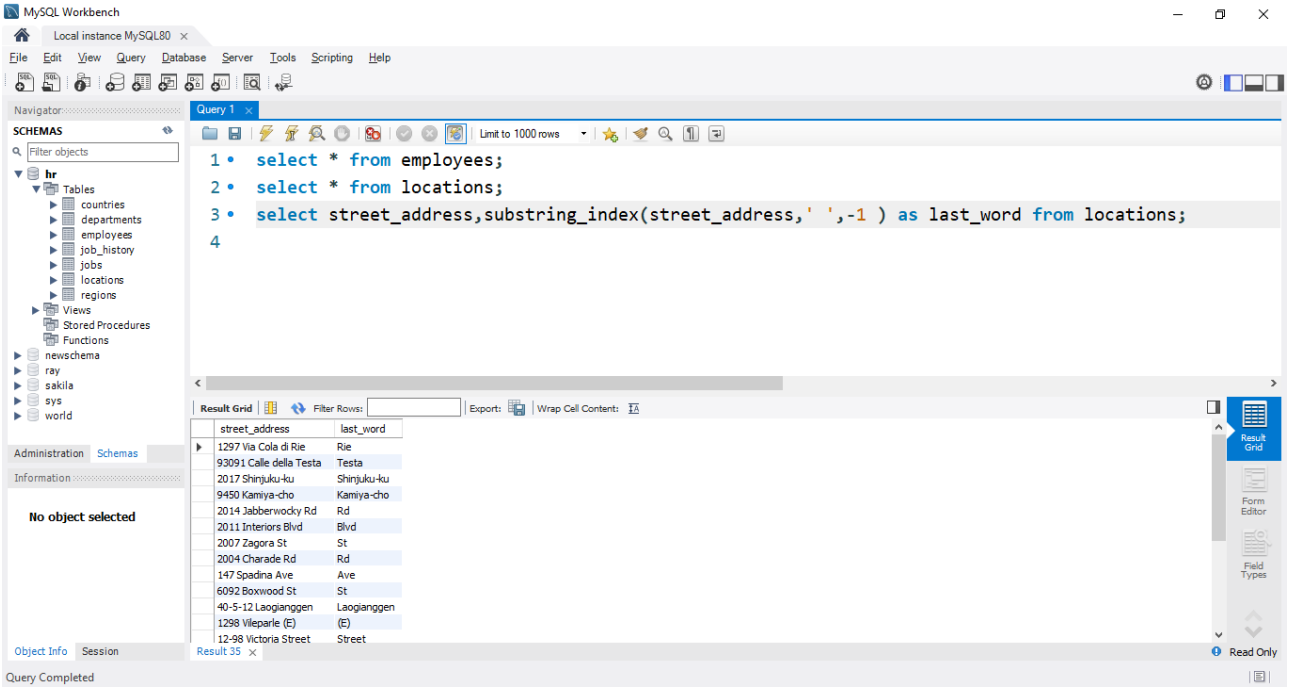
28. Write a query to extract the last 4 character of phone numbers

select substr(phone_number,-4,4) as phone from employees;



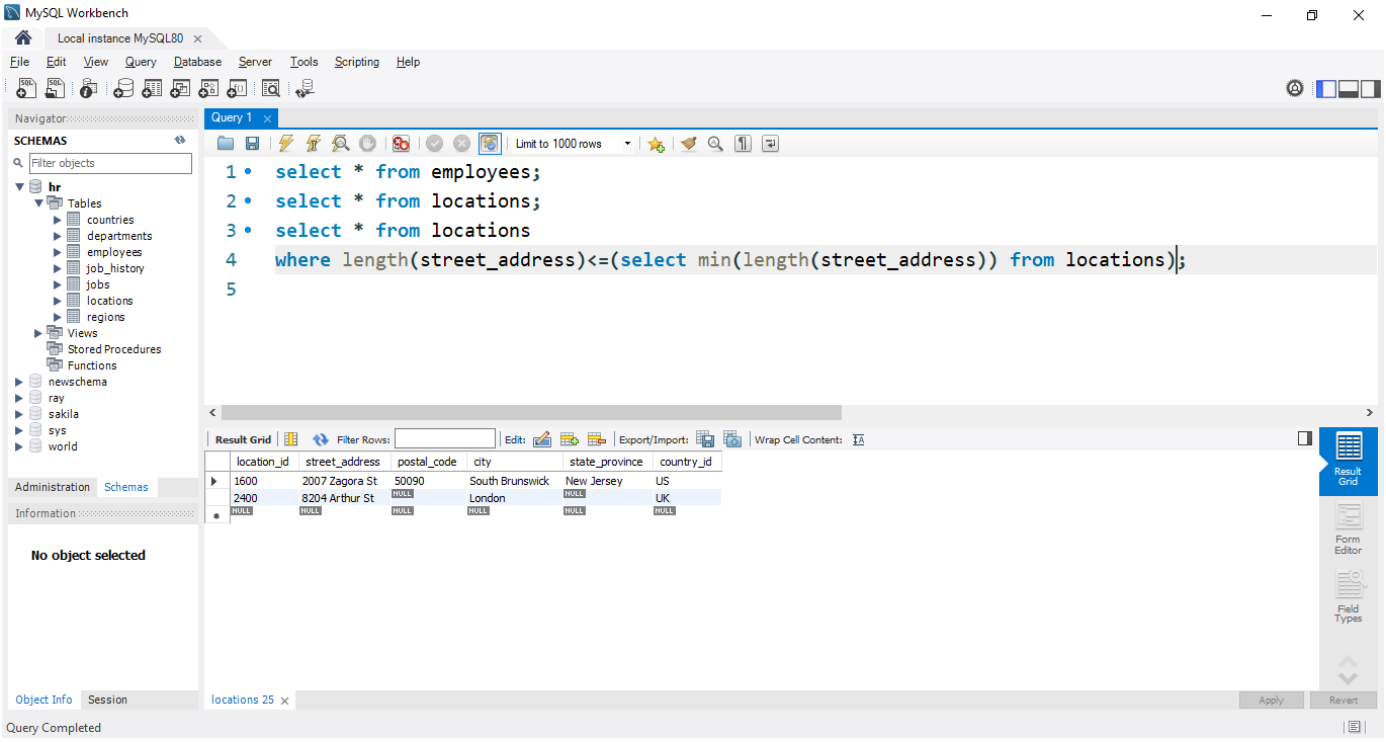
29. Write a query to get the last word of the street address

select street_address,substring_index(street_address,' ',-1) as last_word from locations;

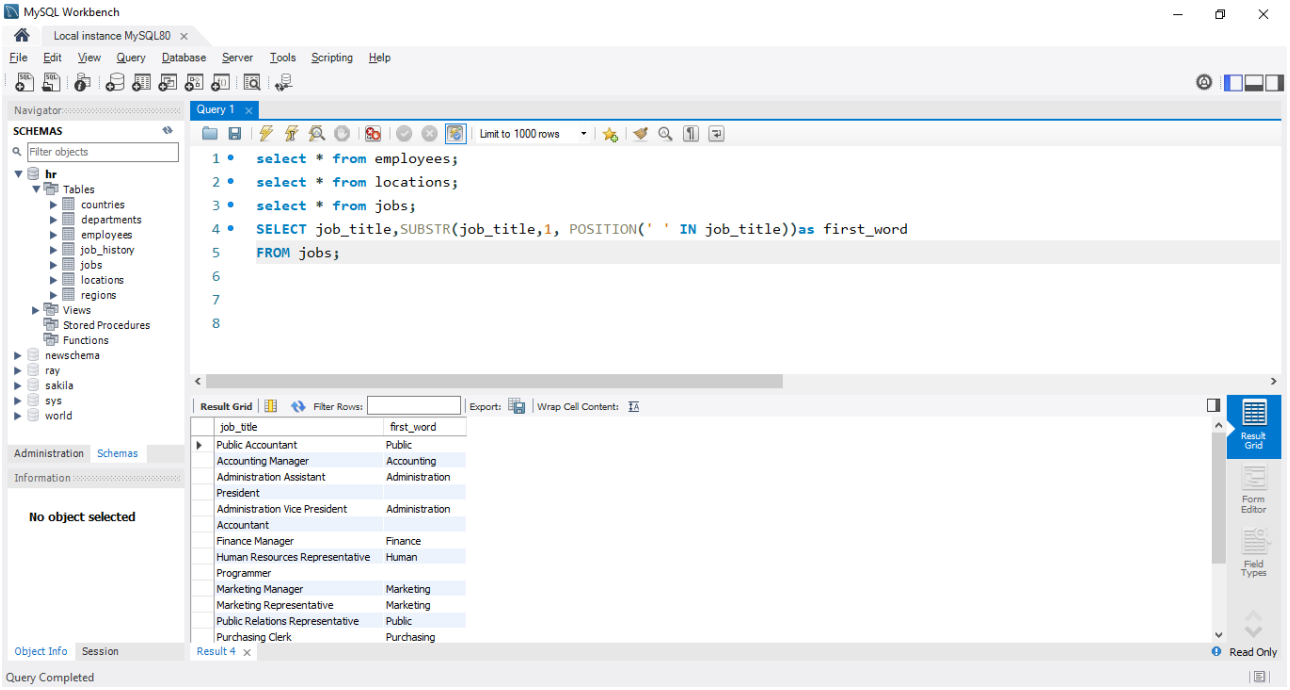


30. Write a query to get the locations that have minimum street length

select * from locations where length(street_address)<=(select min(length(street_address)) from locations);

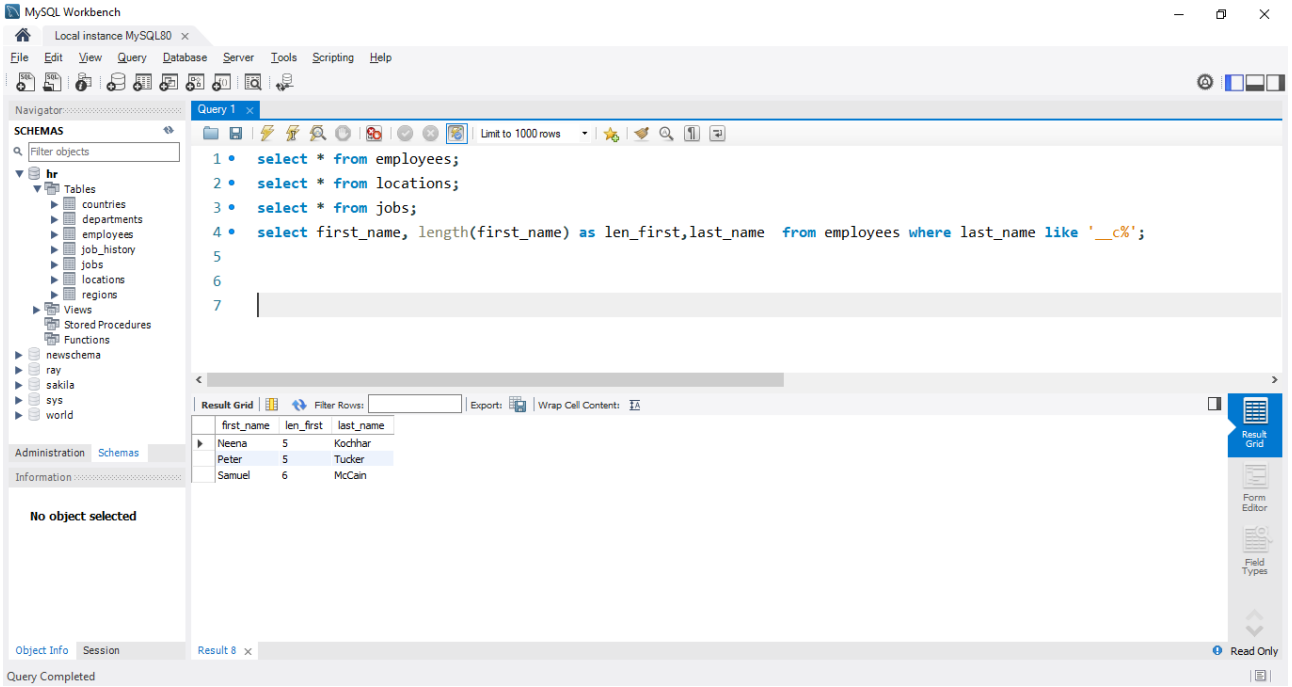


31. Write a query to display the first word from those job titles which contains more than one words
SELECT job_title,SUBSTR(job_title,1, POSITION(' ' IN job_title))as first_word
FROM jobs;.



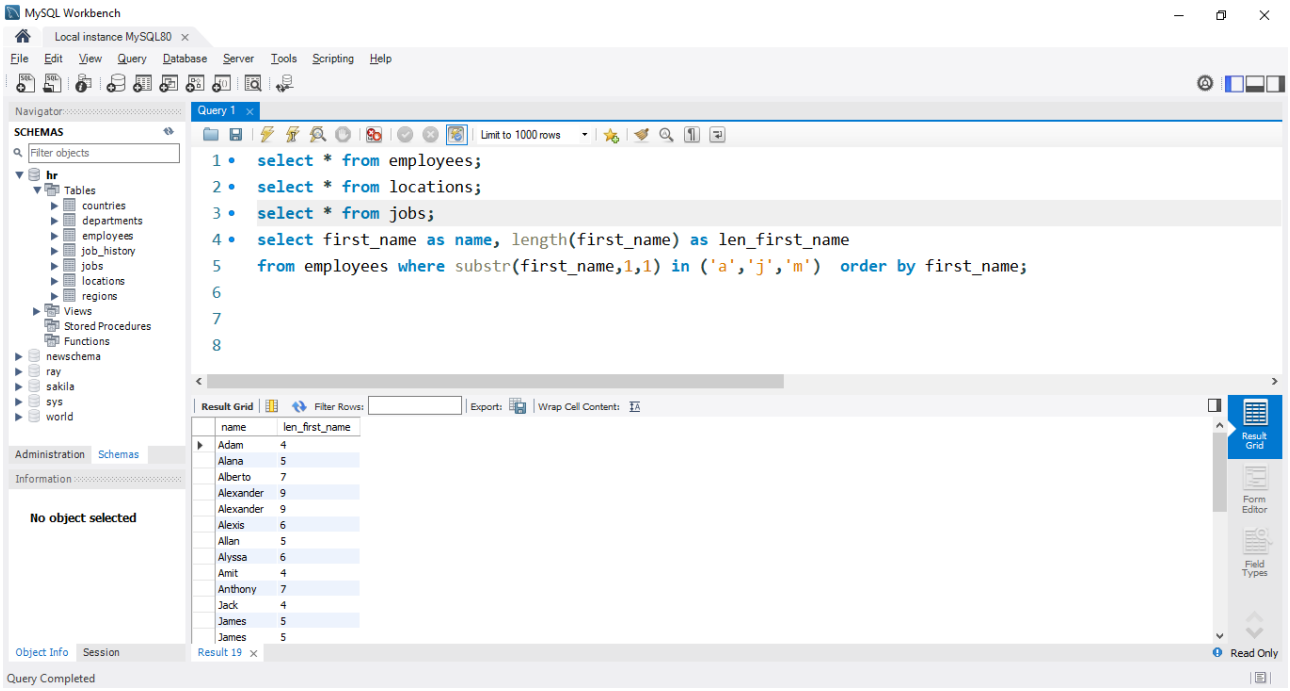
32. Write a query to display the length of first name for employees where last name contain character 'c' after 2nd position

select first_name, length(first_name) as len_first,last_name from employees where last_name like '__c%';



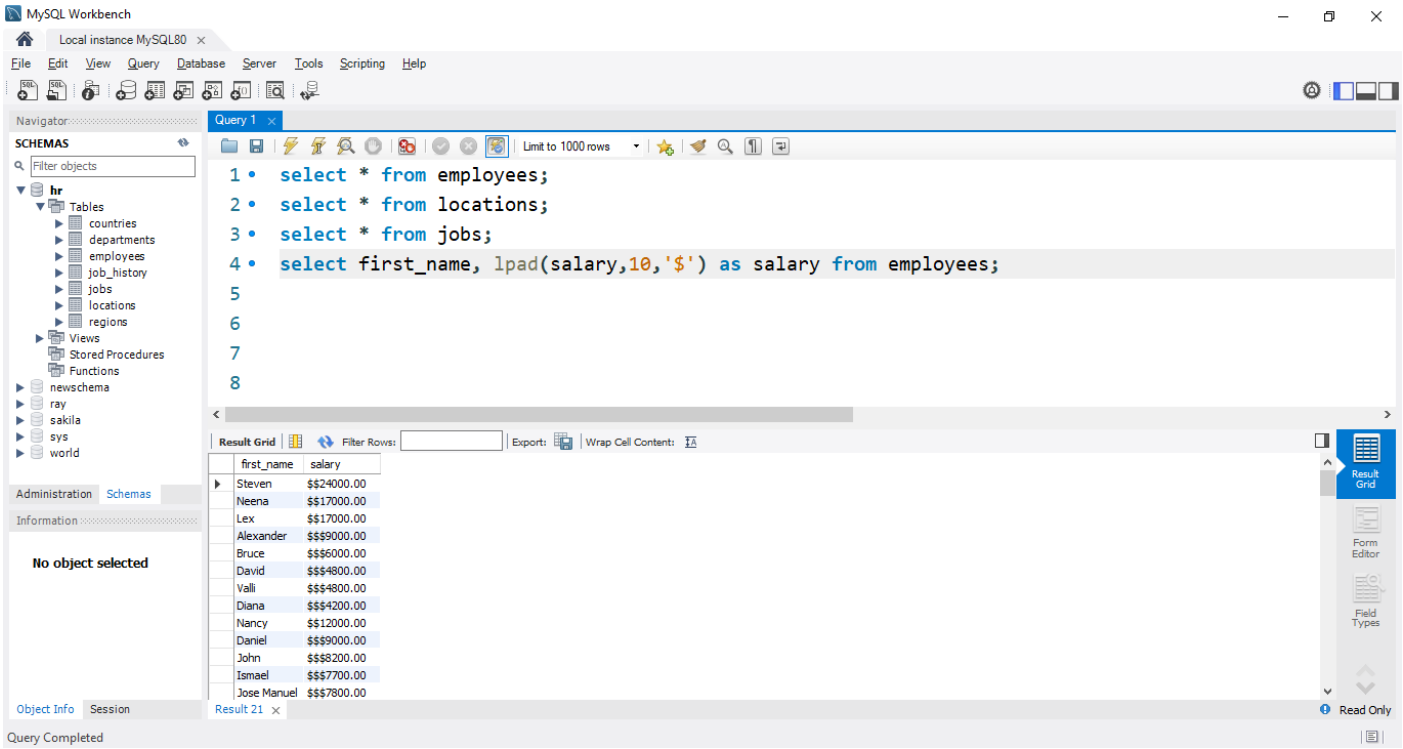
33. Write a query that displays the first name and the length of the first name for all employees whose name starts with the letters 'A', 'J' or 'M'. Give each column an appropriate label. Sort the results by the employees' first names.

```
select first_name as name, length(first_name) as len_first_name
from employees where substr(first_name,1,1) in ('a','j','m')  order by first_name;
```



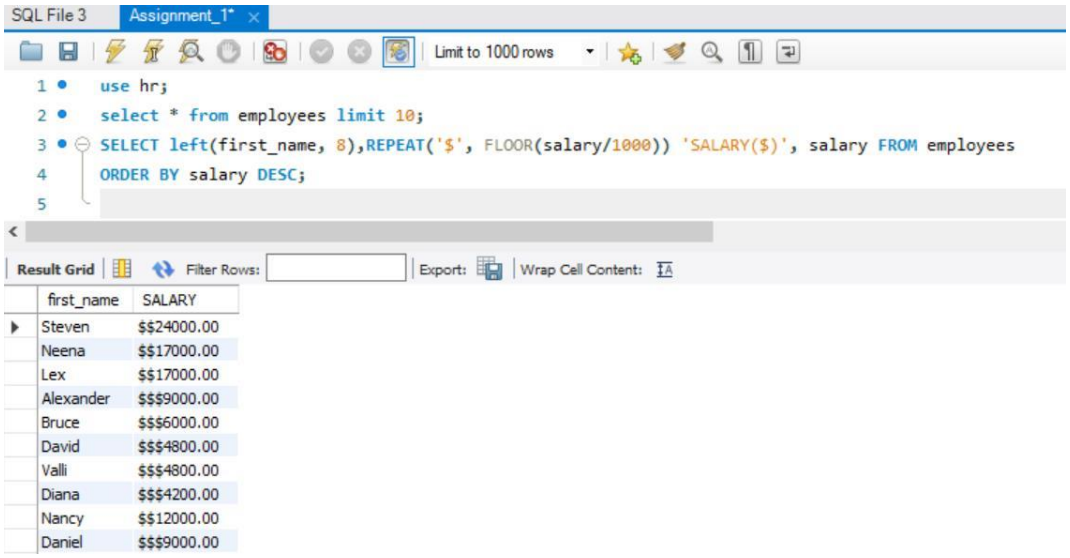
34. Write a query to display the first name and salary for all employees. Format the salary to be 10 characters long, left-padded with the $ symbol. Label the column SALARY

```
select first_name, lpad(salary,10,'$') as salary from employees;
```



35. Write a query to display the first eight characters of the employees' first names and indicates the amounts of their salaries with '$' sign. Each '$' sign signifies a thousand dollars. Sort the data in descending order of salary

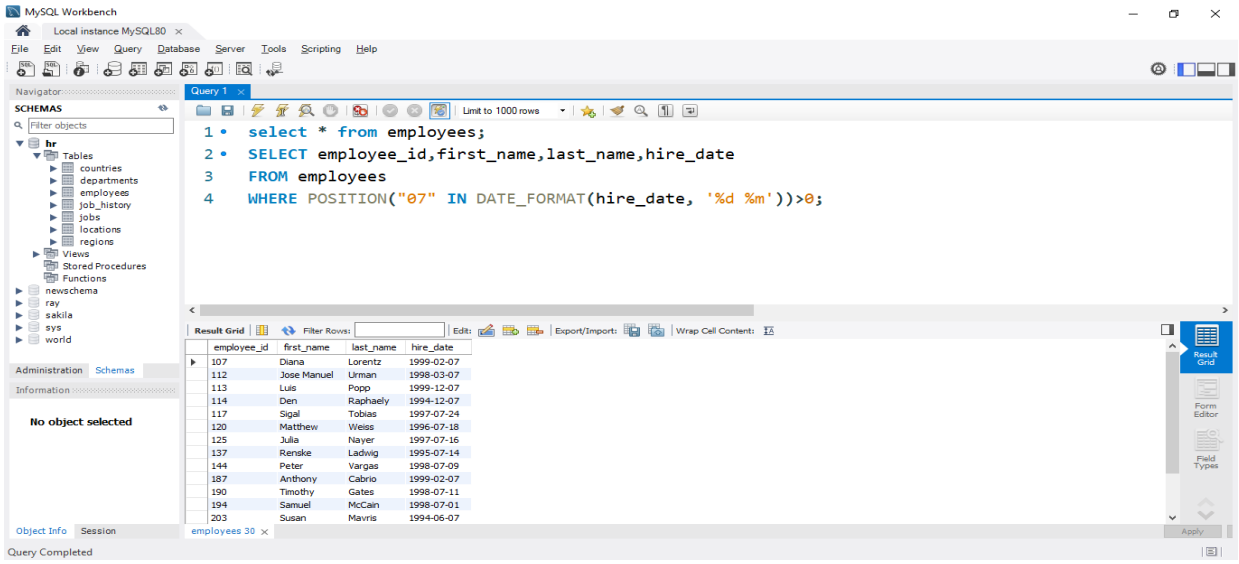
```
SELECT left(first_name, 8),
REPEAT('$', FLOOR(salary/1000))
'SALARY($)', salary
FROM employees
ORDER BY salary DESC;
```



first_name	SALARY
Steven	$$24000.00
Neena	$$17000.00
Lex	$$17000.00
Alexander	$$$9000.00
Bruce	$$$6000.00
David	$$$4800.00
Valli	$$$4800.00
Diana	$$$4200.00
Nancy	$$12000.00
Daniel	$$$9000.00

36. Write a query to display the employees with their code, first name, last name and hire date who hired either on seventh day of any month or seventh month in any year

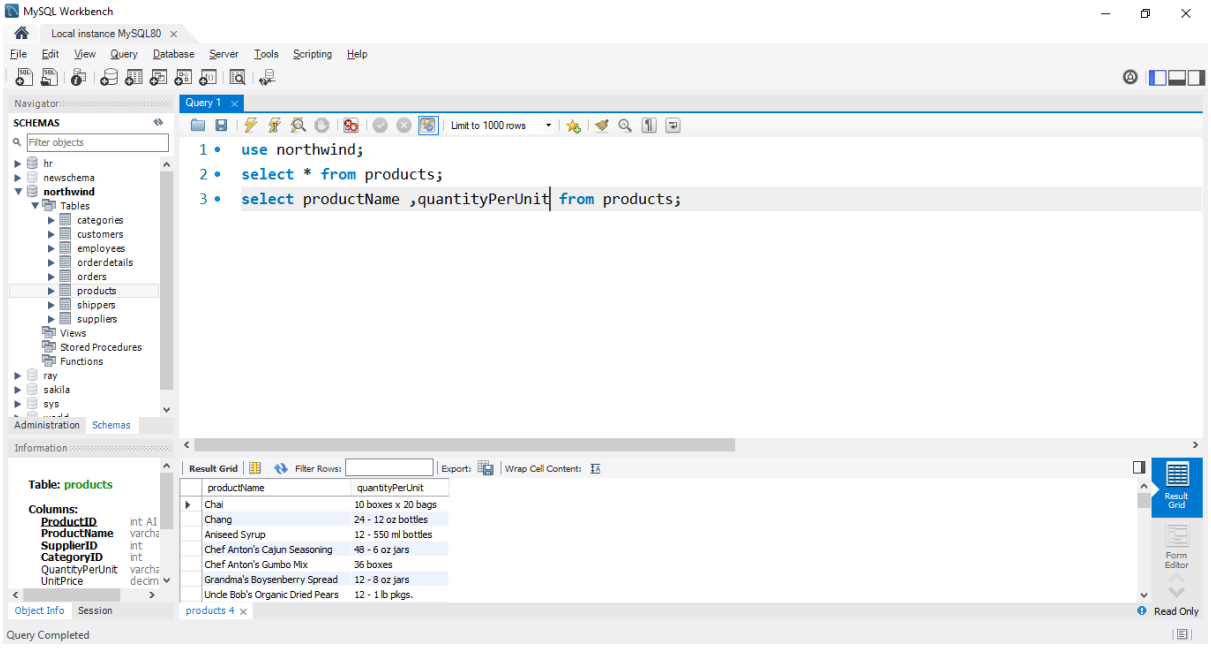
```
SELECT employee_id,first_name,last_name,hire_date FROM employees
WHERE POSITION("07" IN DATE_FORMAT(hire_date, '%d %m'))>0;
```



Northwind Database Exercises-

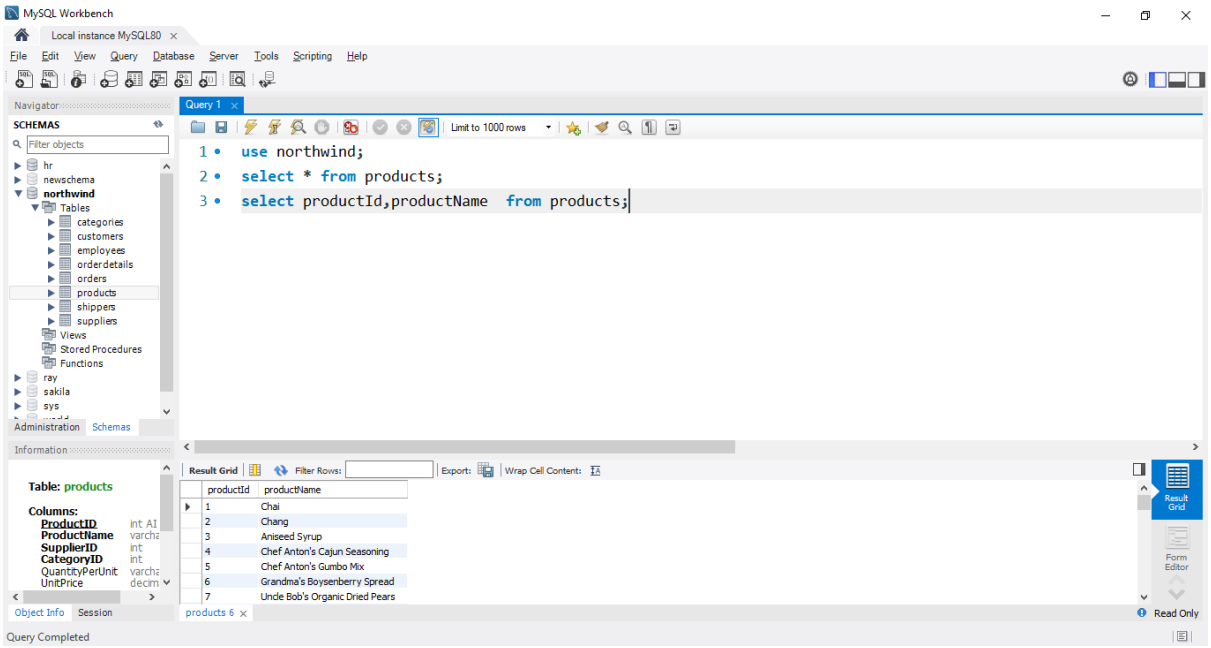
1. Write a query to get Product name and quantity/unit

select productName ,quantityPerUnit from products;

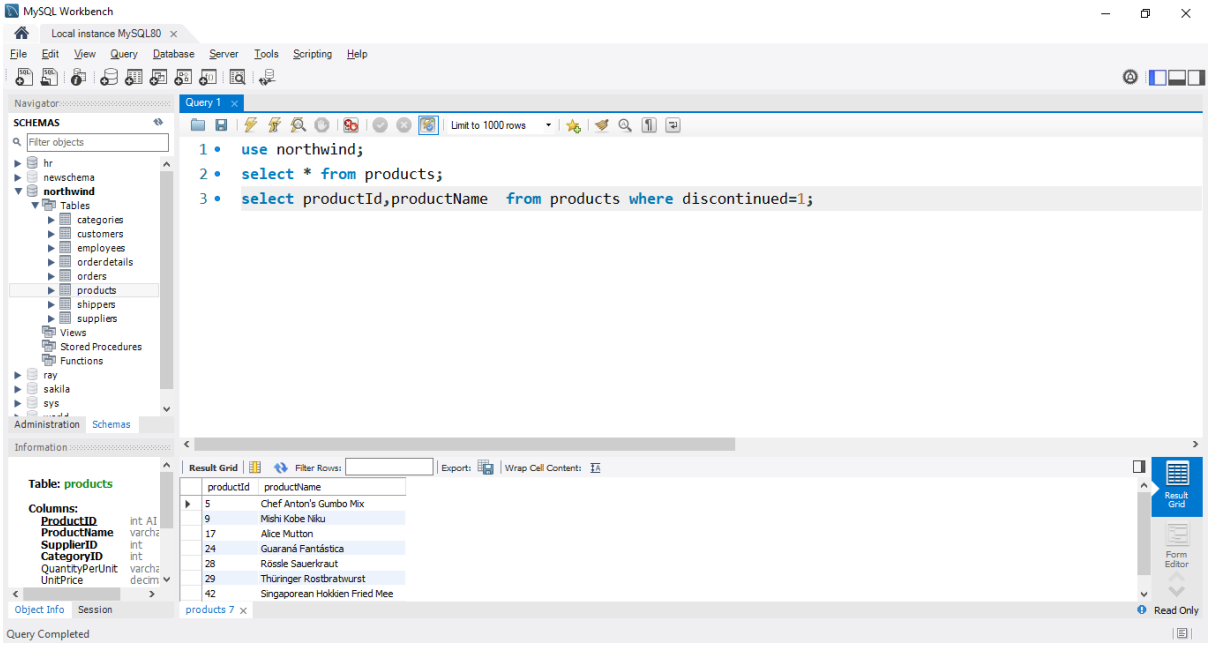


2. Write a query to get current Product list (Product ID and name)

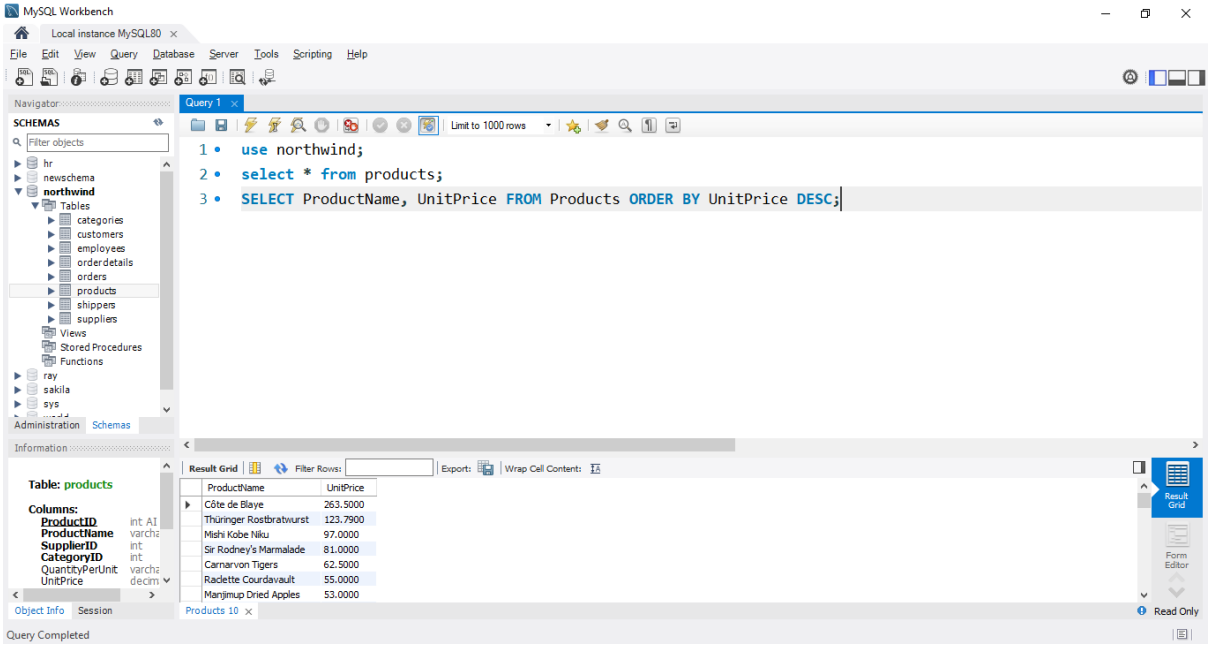
select productId,productName from products;



3. Write a query to get discontinued Product list (Product ID and name)
   select productId,productName from products where discontinued=1;

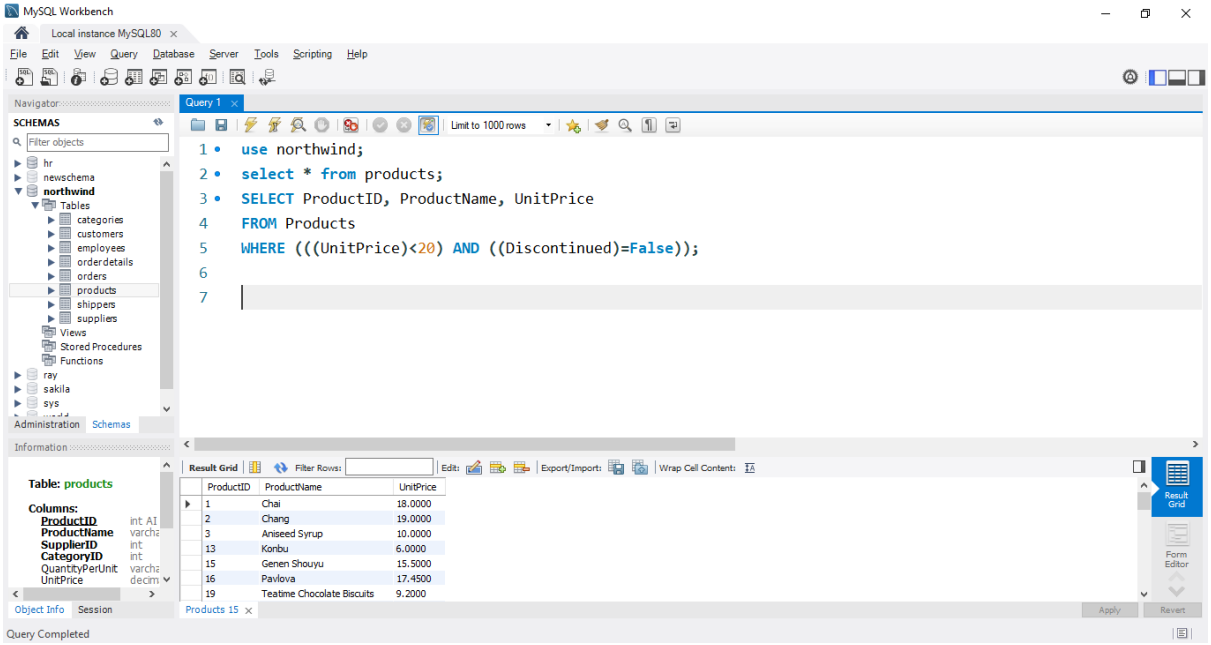


4. Write a query to get most expense and least expensive Product list (name and unit price)
   SELECT ProductName, UnitPrice FROM Products ORDER BY UnitPrice DESC;



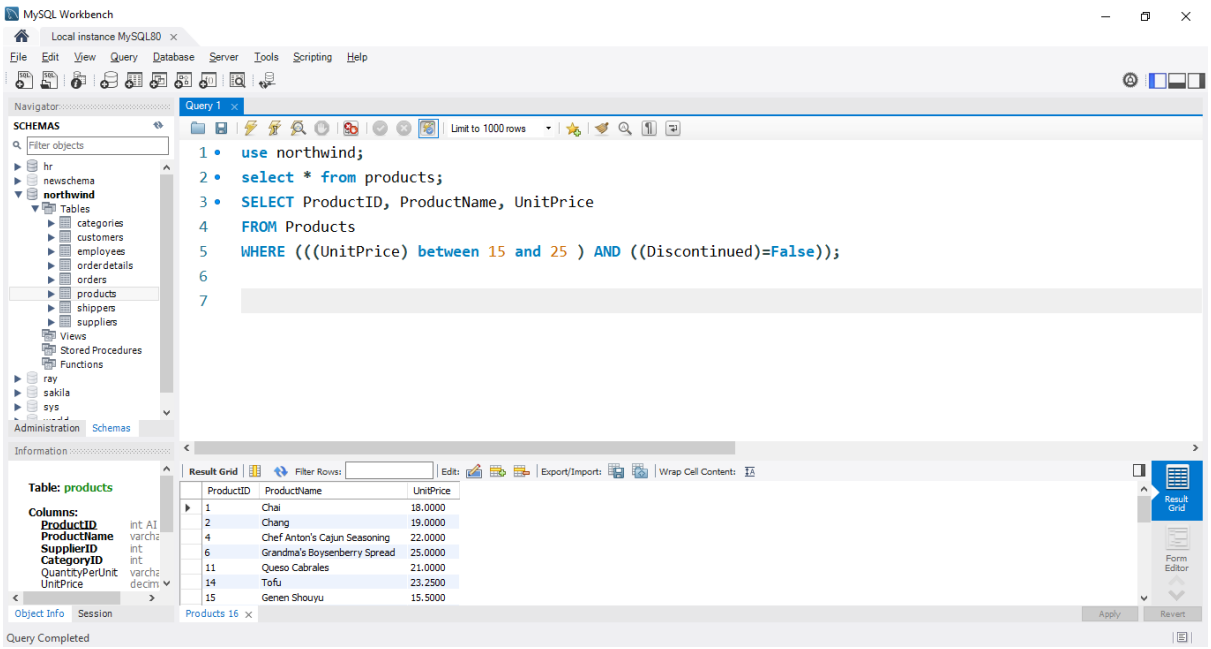
5. Write a query to get Product list (id, name, unit price) where current products cost less than $20

```
SELECT ProductID, ProductName, UnitPrice FROM Products
WHERE (((UnitPrice)<20) AND ((Discontinued)=False));
```



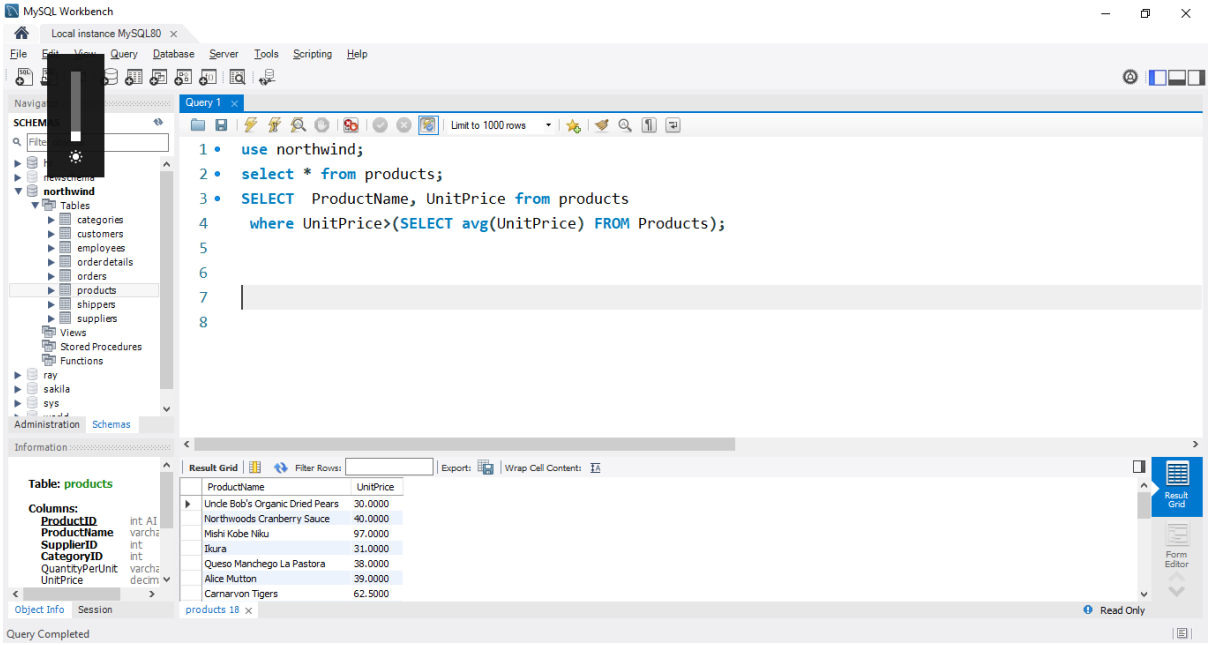
6. Write a query to get Product list (id, name, unit price) where products cost between $15 and $25

```
SELECT ProductID, ProductName, UnitPrice
FROM Products
WHERE (((UnitPrice) between 15 and 25 ) AND ((Discontinued)=False));
```



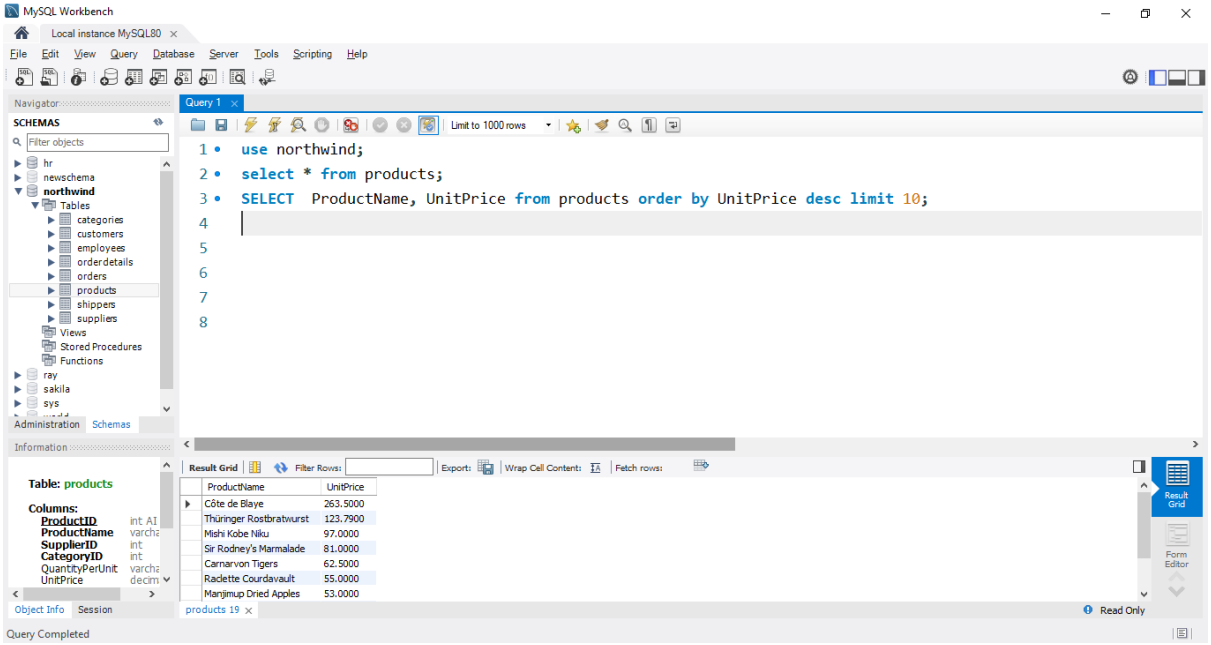
7. Write a query to get Product list (name, unit price) of above average price.

```
select * from products;
SELECT  ProductName, UnitPrice from products
 where UnitPrice>(SELECT avg(UnitPrice) FROM Products);
```



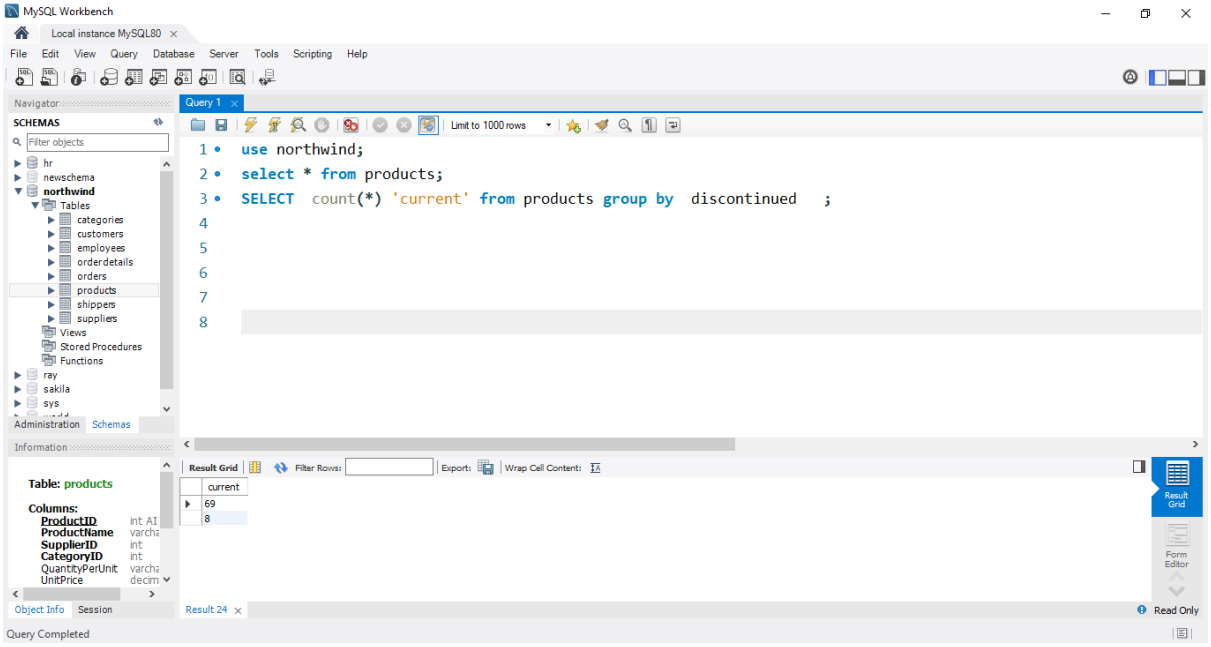
8. Write a query to get Product list (name, unit price) of ten most expensive products

```
SELECT  ProductName, UnitPrice from products order by UnitPrice desc limit 10;
```



9. Write a query to count current and discontinued products

```
SELECT  count(*) 'current' from products group by  discontinued  ;
```



10. Write a query to get Product list (name, units on order , units in stock) of stock is less than the quantity on order

```
SELECT ProductName,  UnitsOnOrder , UnitsInStock
FROM Products
WHERE (((Discontinued)=False) AND ((UnitsInStock)<UnitsOnOrder));
```