NAME: KAUSHAL BAGHEL ROLL NO: 21MAI0003

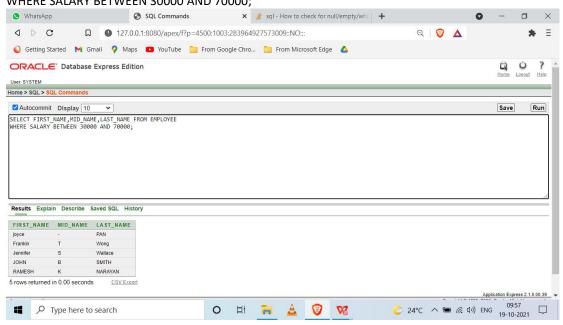
EXERCISE-3

Operators and Functions

Aim: To understand different operators and types of function in SQL

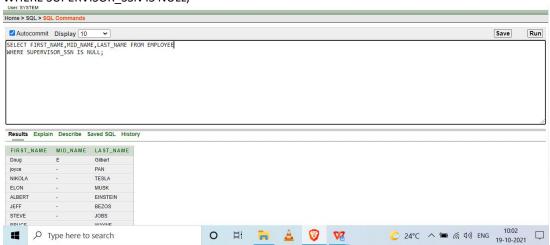
1. Find the employee names whose salary lies in the range between 30000 and 70000.

SELECT FIRST_NAME,MID_NAME,LAST_NAME FROM EMPLOYEE WHERE SALARY BETWEEN 30000 AND 70000;

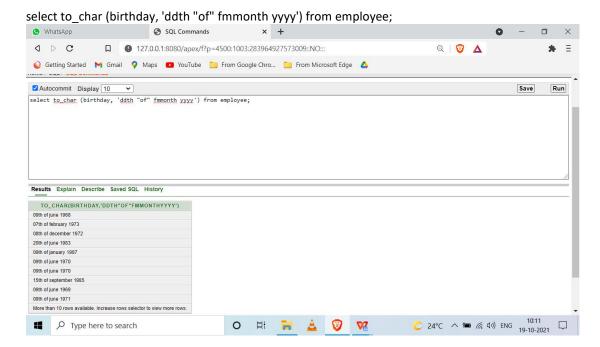


2. Find the employees who have no supervisor.

SELECT FIRST_NAME,MID_NAME,LAST_NAME FROM EMPLOYEE WHERE SUPERVISOR_SSN IS NULL;



3. Display the bdate of all employees in the format 'DDthMonthYYYY'.

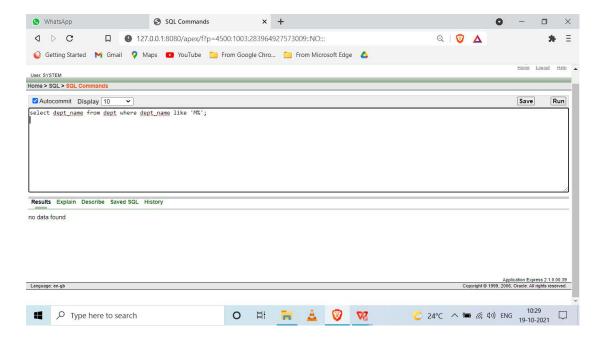


4. Display the employee names whose bdate is on or before 1978. SELECT FIRST_NAME,LAST_NAME,BIRTHDAY FROM EMPLOYEE

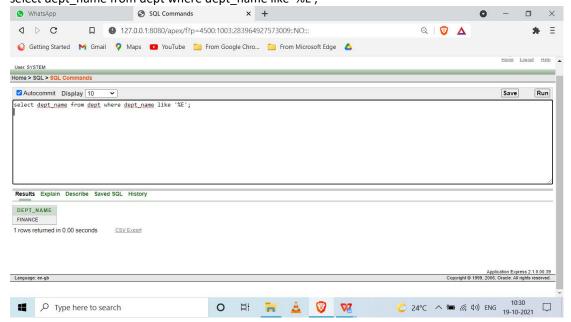
WHERE BIRTHDAY<('01-JAN-1978'); × + SQL Commands X WhatsApp ☐ 127.0.0.1:8080/apex/f?p=4500:1003:283964927573009::NO::: Q | 🖁 🛕 Ξ 🔾 Getting Started M Gmail 💡 Maps 💶 YouTube 📋 From Google Chro... 📋 From Microsoft Edge 🛕 MAUTOCOMMIN DISPLAY TO save Kun SELECT FIRST_NAME,LAST_NAME,BIRTHDA FROM EMPLOYEE WHERE BIRTHDAY<('01-JAN-1978'); Results Explain Describe Saved SQL History FIRST_NAME LAST_NAME BIRTHDAY 09-JUN-68 PAN 07-FEB-73 joyce 08-DEC-72 09-JUN-70 NIKOLA TESLA ELON MUSK 09-JUN-70 ALBERT EINSTEIN 09-JUN-69 JEFF BEZOS 09-JUN-71 09-JUN-72 STEVE JOBS BRUCE WAYNE 09-JUN-73 TONY STARK 09-JUN-74 10 rows returned in 0.00 seconds C 24°C ヘ 🖦 🦟 ជ១) ENG 10:25 Type here to search A 🔞 🗸

5. Display the department name that starts with 'M'.

select dept_name from dept where dept_name like 'M%';

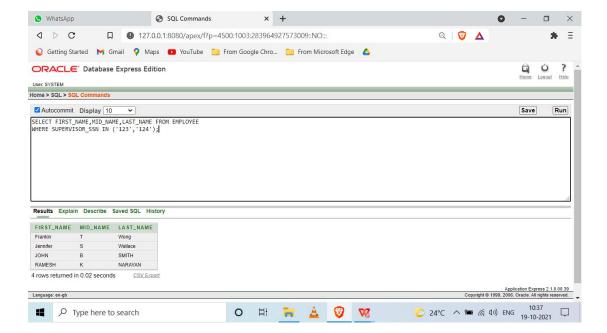


6. Display the department names' that ends with 'E'. select dept_name from dept where dept_name like '%E';

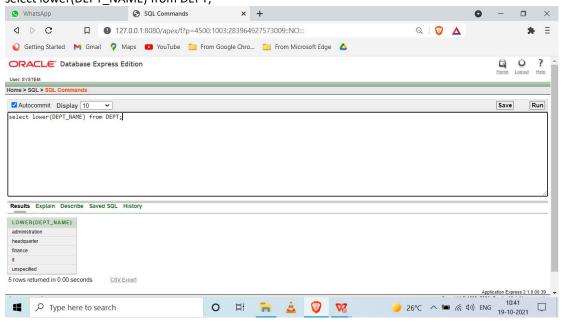


7. Display the names of all the employees having supervisor with any of the following SSN 123, 124

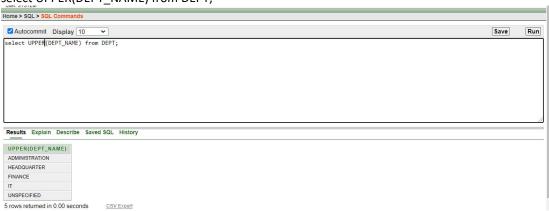
SELECT FIRST_NAME,MID_NAME,LAST_NAME FROM EMPLOYEE WHERE SUPERVISOR_SSN IN ('123','124');



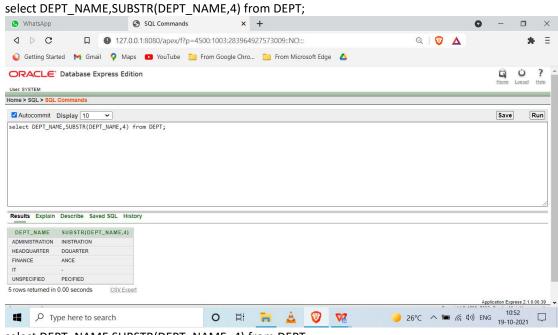
8. Display all the department names in upper case and lower case. select lower(DEPT_NAME) from DEPT;



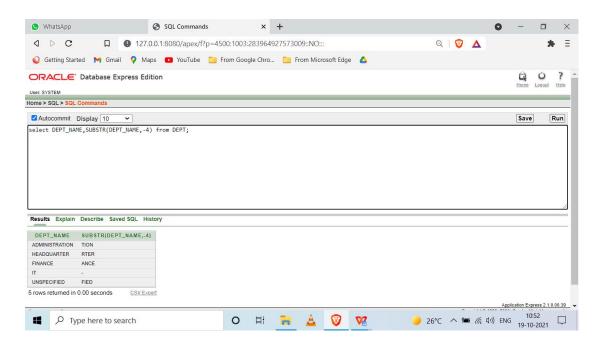
select UPPER(DEPT_NAME) from DEPT;



9. Display the first four characters and last four of the department names using substring function

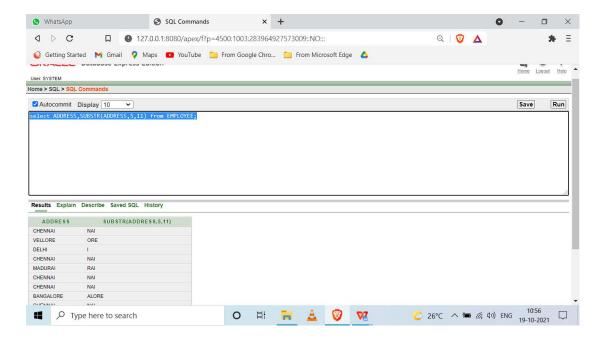


select DEPT_NAME,SUBSTR(DEPT_NAME,-4) from DEPT;

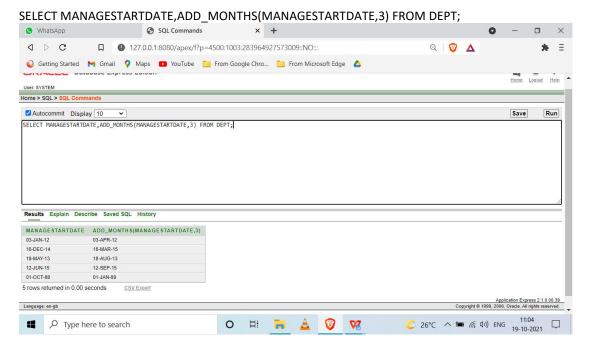


10. Display the substring of the Address (starting from 5th position to 11 th position) of all employees

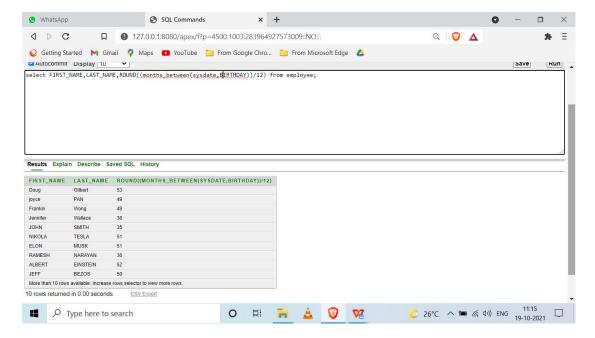
select ADDRESS, SUBSTR(ADDRESS, 5, 11) from EMPLOYEE;



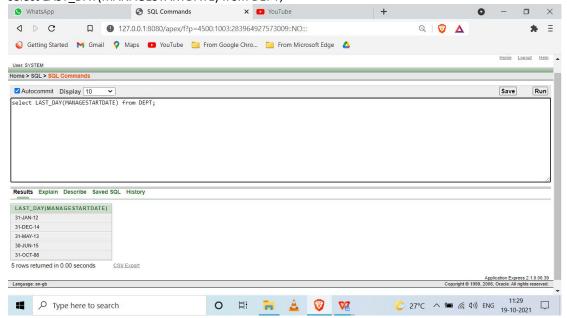
11. Display the Mgrstartdate on adding three months to it.



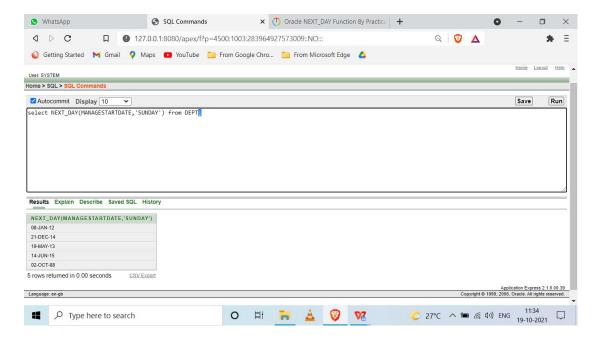
12. Display the age of all the employees rounded to two digits. select FIRST_NAME,LAST_NAME,ROUND((months_between(sysdate,BIRTHDAY))/12) from employee;



13. Find the last day and next day of the month in which each manager has joined. select LAST_DAY(MANAGESTARTDATE) from DEPT;

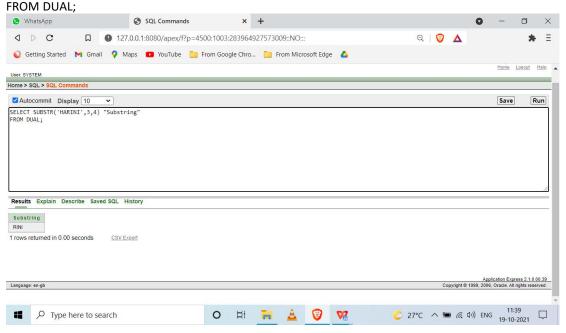


select NEXT DAY(MANAGESTARTDATE, 'SUNDAY') from DEPT;



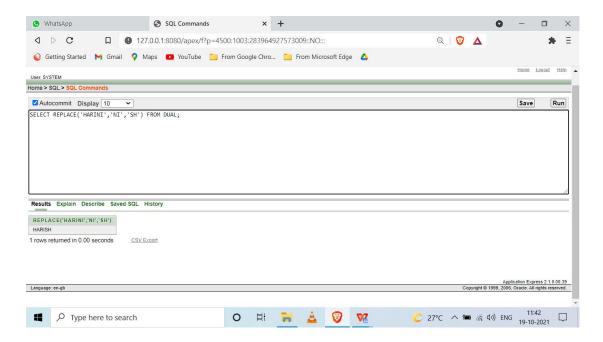
14. Print a substring from the string 'Harini'.

SELECT SUBSTR('HARINI',3,4) "Substring"

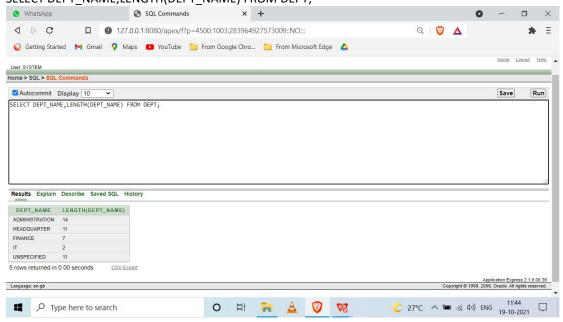


15. Replace the string 'ni' from 'Harini' by 'sh'

SELECT REPLACE('HARINI','NI','SH') FROM DUAL;

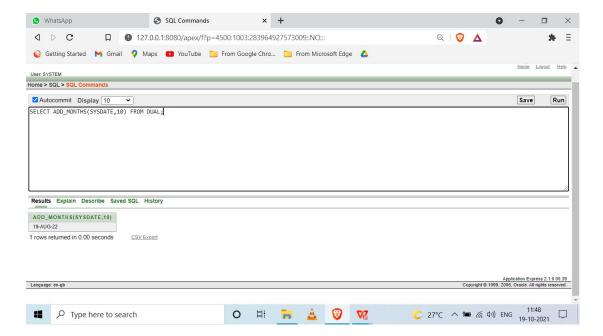


16. Print the length of all the department names. SELECT DEPT_NAME,LENGTH(DEPT_NAME) FROM DEPT;

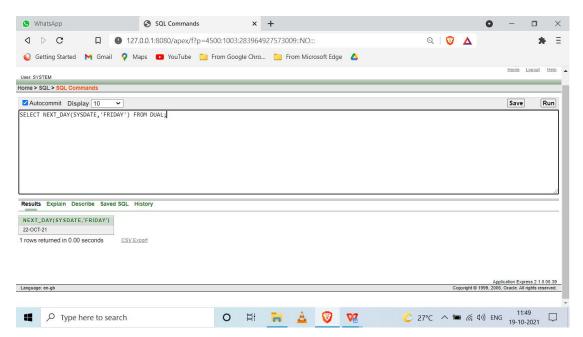


17. Display the date after 10 months from current date.

SELECT ADD MONTHS(SYSDATE,10) FROM DUAL;

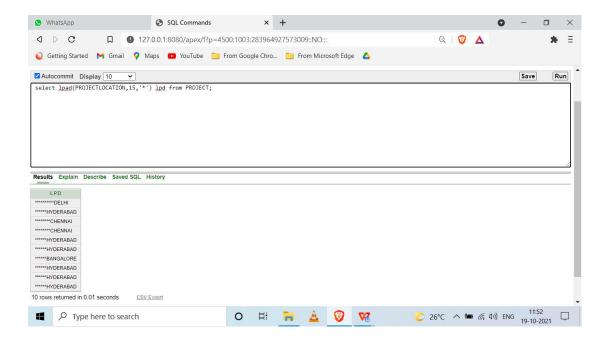


18. Display the next occurrence of Friday in this month. SELECT NEXT_DAY(SYSDATE,'FRIDAY') FROM DUAL;



19. Display the project location padded with **** on left side.

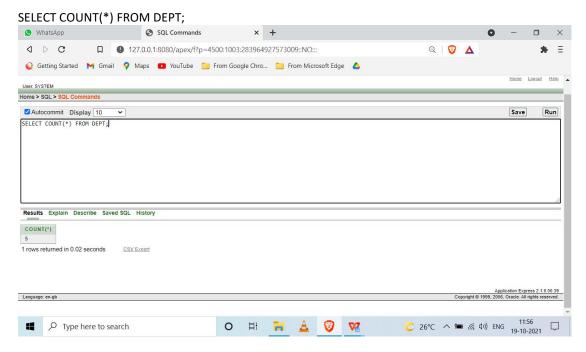
select lpad(PROJECTLOCATION,15,'*') lpd from PROJECT;



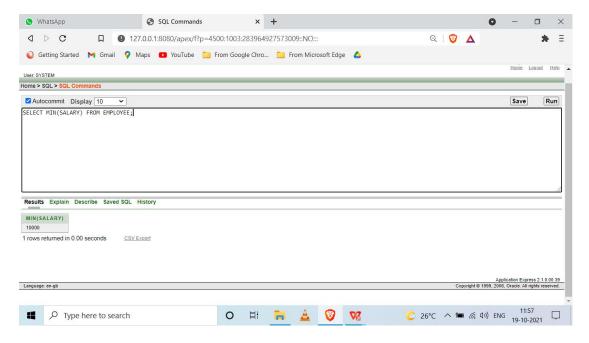
Exercise: IV

Group Functions

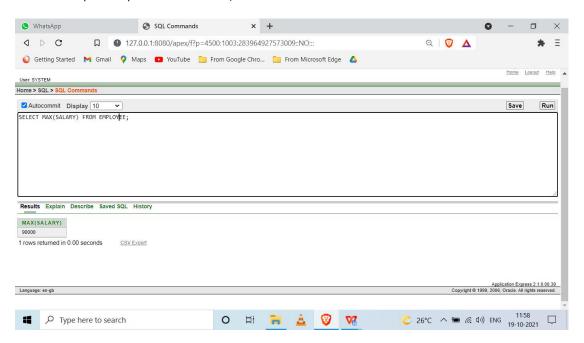
1) How many different departments are there in the 'employee' table



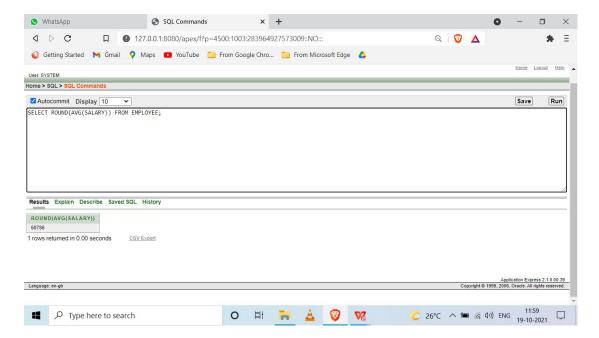
2) For each department display the minimum and maximum employee salaries SELECT MIN(SALARY) FROM EMPLOYEE;



SELECT MAX(SALARY) FROM EMPLOYEE;

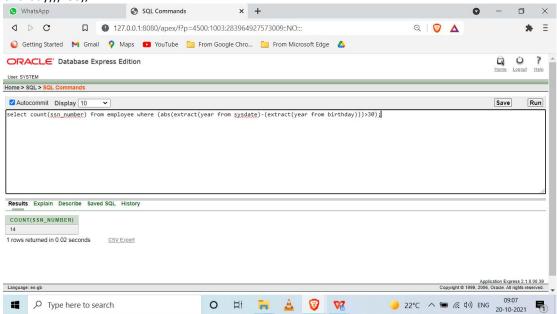


3) Print the average annual salary. SELECT ROUND(AVG(SALARY)) FROM EMPLOYEE;

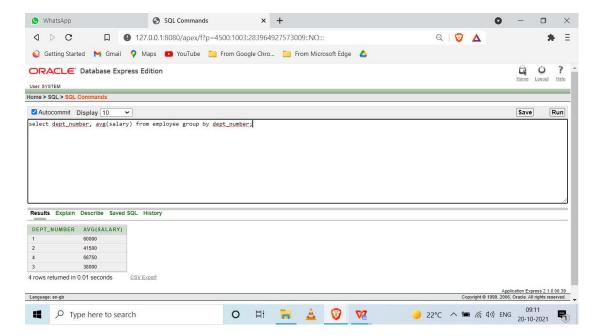


4) Count the number of employees over 30 age

select count(ssn_number) from employee where (abs(extract(year from sysdate)-(extract(year from birthday)))>30);

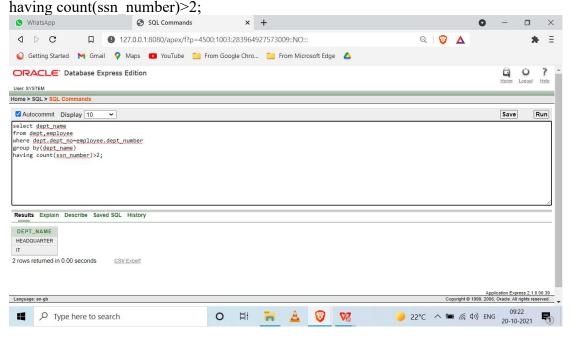


5) Print the Department name and average salary of each department select dept_number, avg(salary) from employee group by dept_number;

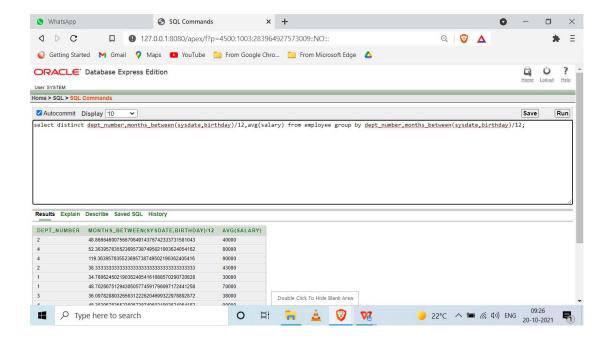


6) Display the department name which contains more than 2 employees.

select dept_name from dept,employee where dept.dept_no=employee.dept_number group by(dept_name)

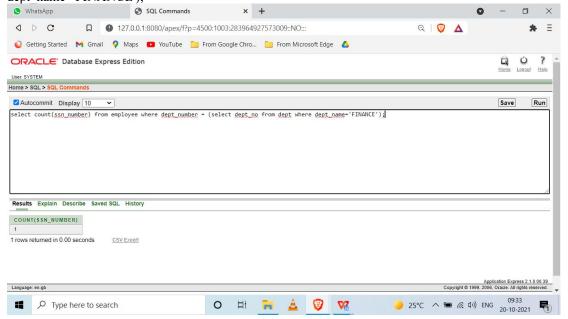


7) Calculate the average salary of employees by department and age select distinct dept_number,months_between(sysdate,birthday)/12,avg(salary) from employee group by dept_number,months_between(sysdate,birthday)/12;

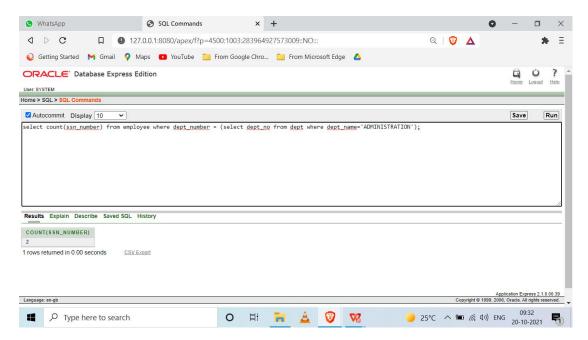


8) Count separately the number of employees in the finance and administration department.

select count(ssn_number) from employee where dept_number = (select dept_no from dept where dept_name='FINANCE');



select count(ssn_number) from employee where dept_number = (select dept_no from dept where dept_name='ADMINISTRATION');



9) List out the employees based on their seniority. select first_name,last_name,months_between(sysdate,birthday)/12 from employee order by months_between(sysdate,birthday)/12 desc;

