Tutorial – 8

Implement Relational Algebra Expressions for all the queries on University Online Examination Scheduling system

1) Display the number of students enrolled for exam 'DBMS'

DBMS 190031187
Tutorial - 8 Radhakrishna

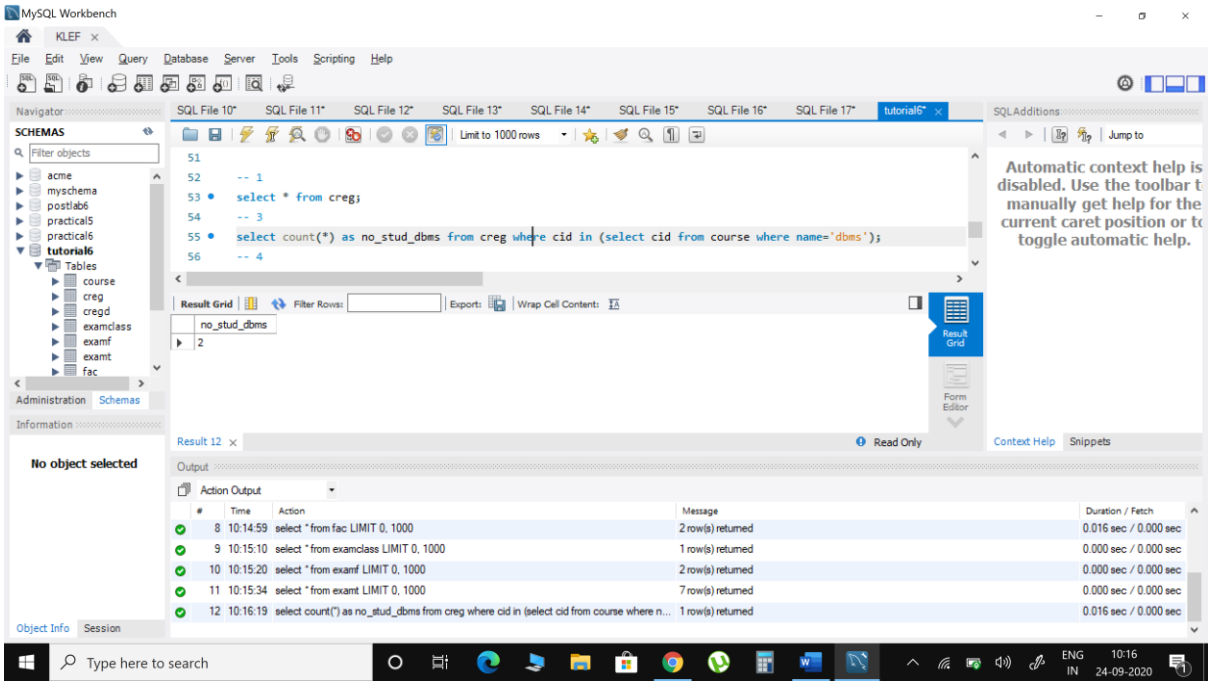
1.

$$temp1 \leftarrow \Pi_{cid}(\sigma_{name="DBMS"}(Course))$$

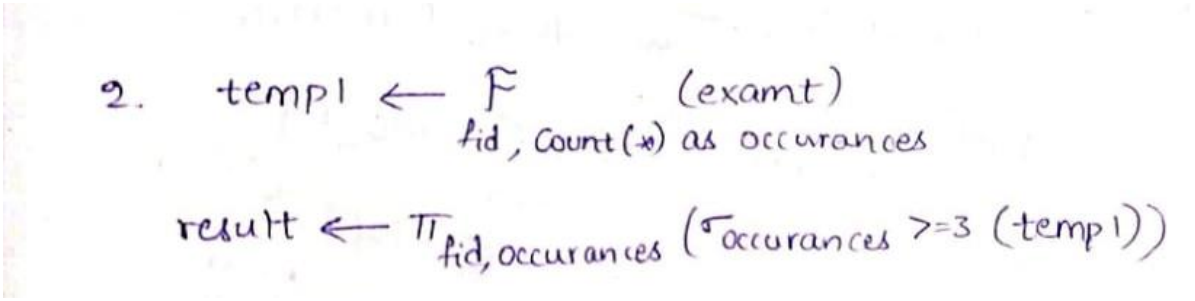
$$temp2 \leftarrow creg \bowtie_{(creg.cid = temp1.cid)} temp1$$

$$result \leftarrow \mathcal{F}_{count(*)\ as\ no\_stud\_dbms}(temp2)$$

select count(*) as no_stud_dbms from creg where cid in (select cid from course where name='dbms');



2) Show the details of proctors having duty more than 3 times

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select * from fac where fid in (select fid from examt group by fid having count(*)>=3);
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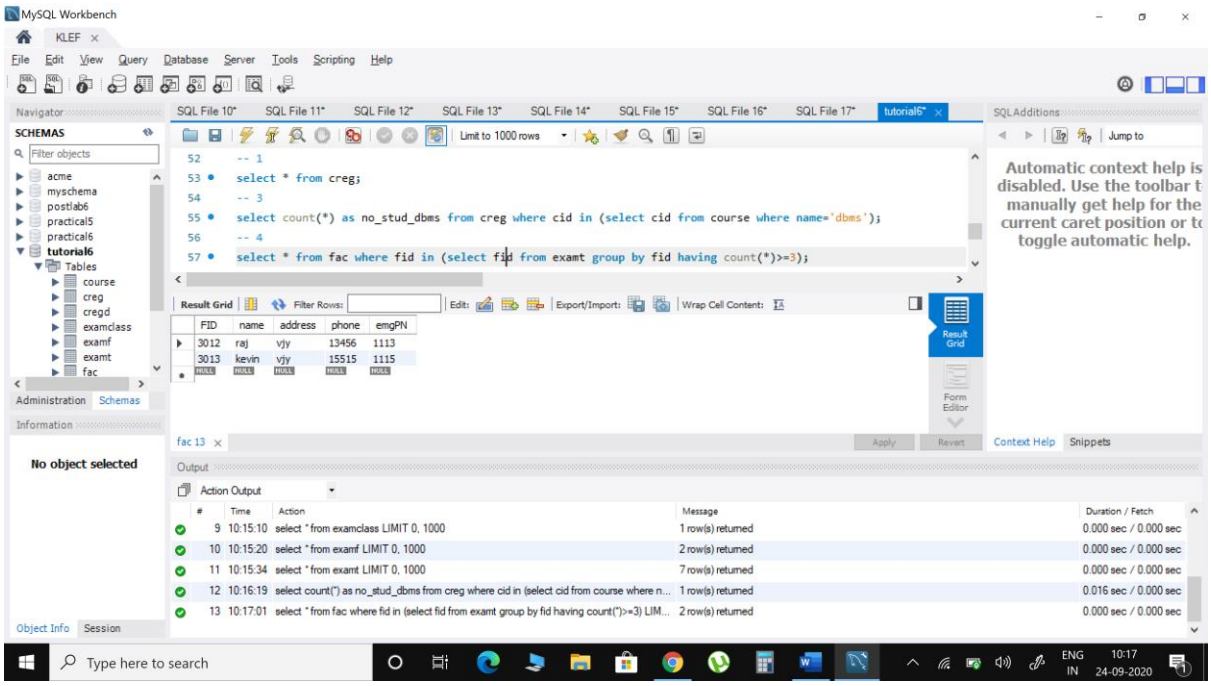
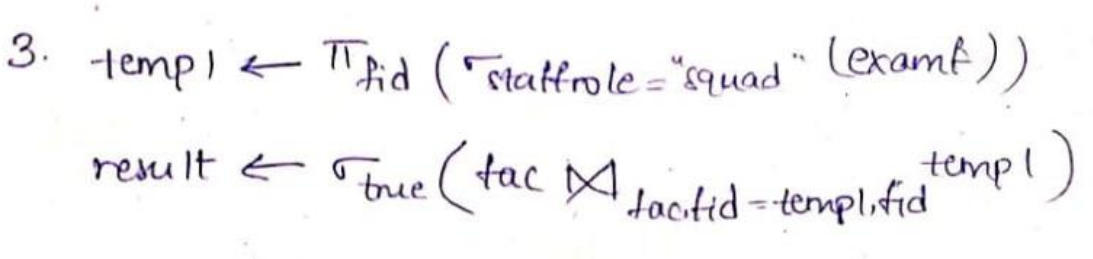


3) Get the details of faculty working as squad

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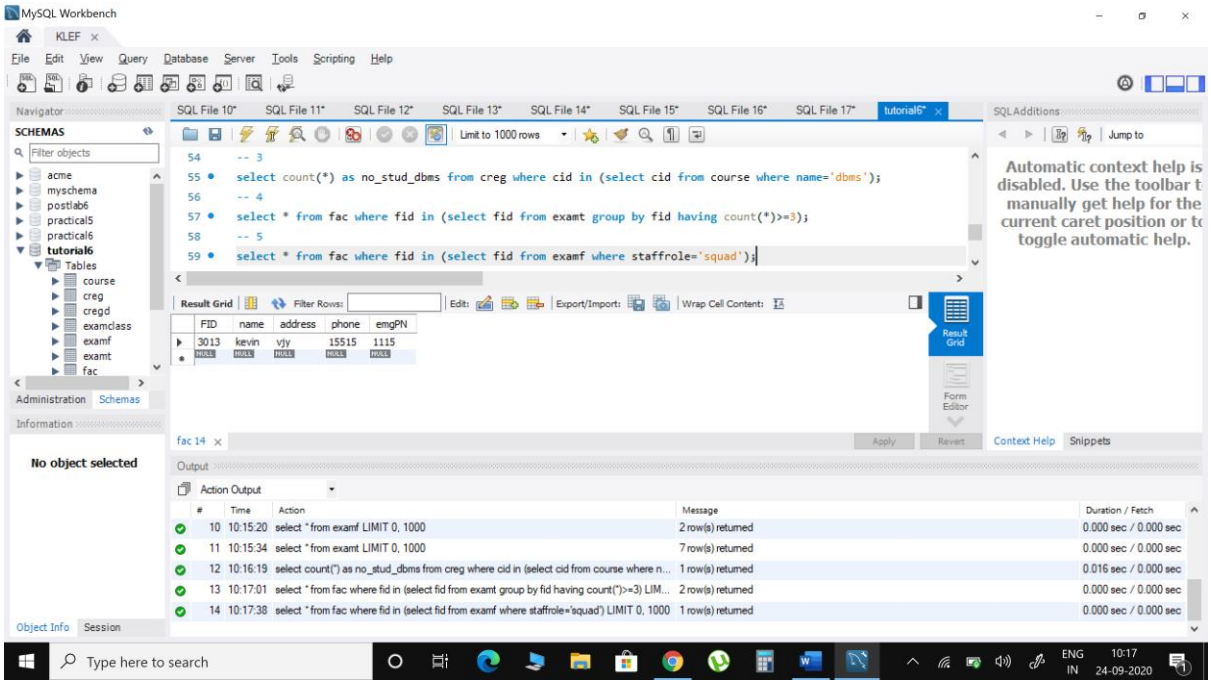
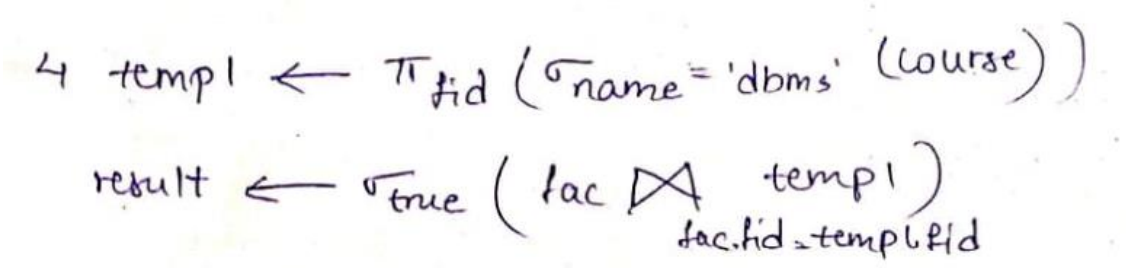
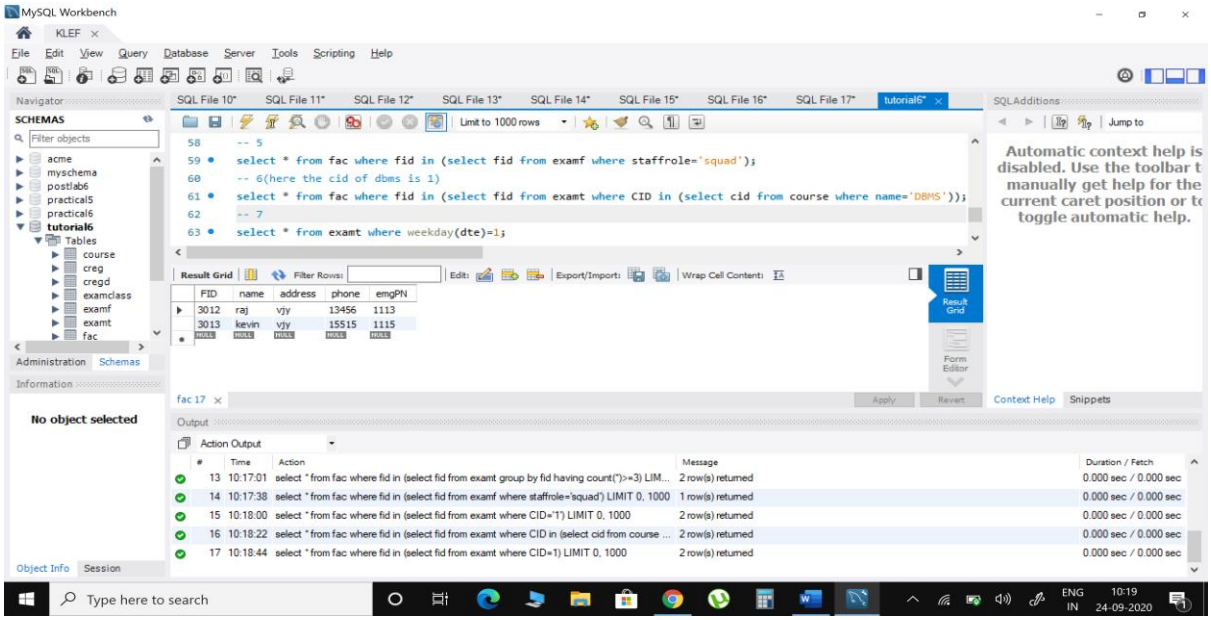
select * from fac where fid in (select fid from examf where staffrole='squad');
```



4) Display the details of proctors and squad for exam 'DBMS'



select * from fac where fid in (select fid from examt where CID in (select cid from course where name='DBMS'));



5) Show the number of rooms allotted for each course on ‘Tuesday’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select * from examt where weekday(dte)=1;
```
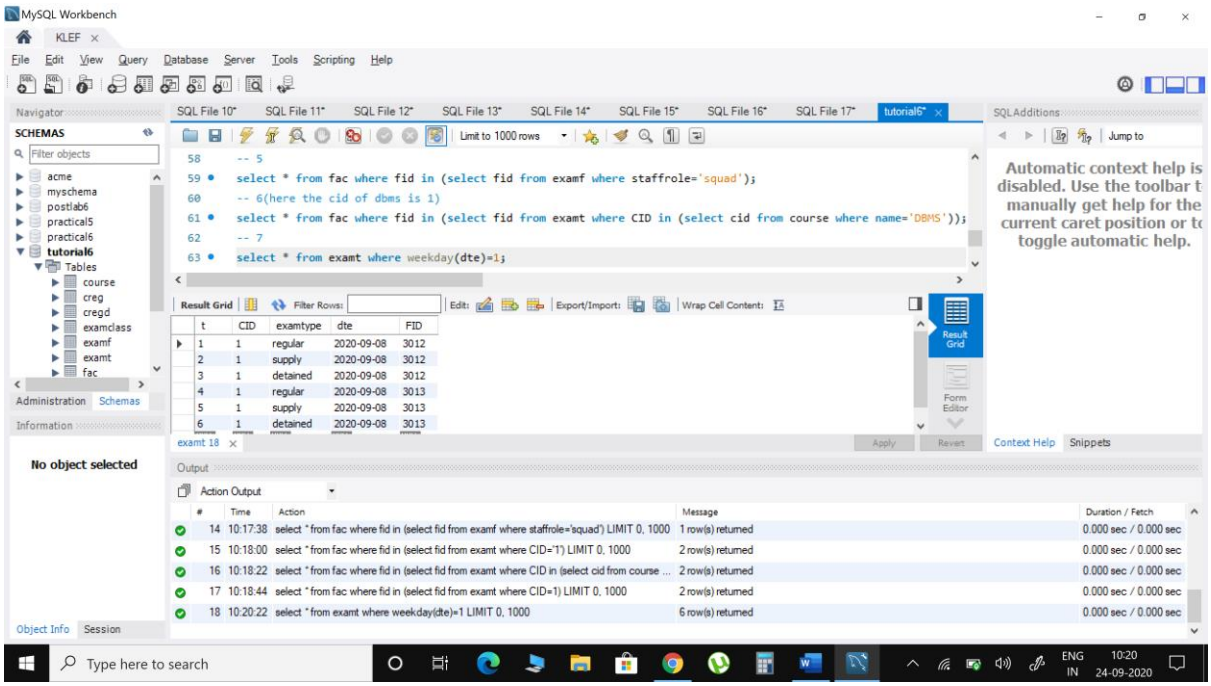
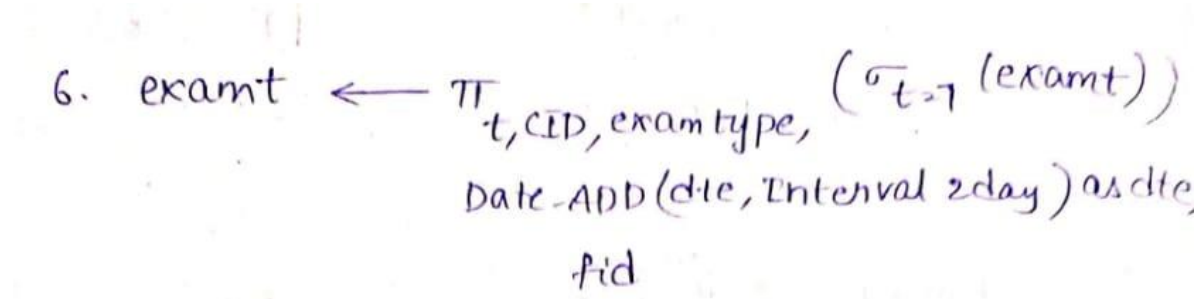



6) Update the exam date of ‘OS’ which is postponed to 2 days after the scheduled date

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update examt set dte='2020-09-11' where cid=2 and t=7;

select * from examt where t=7;
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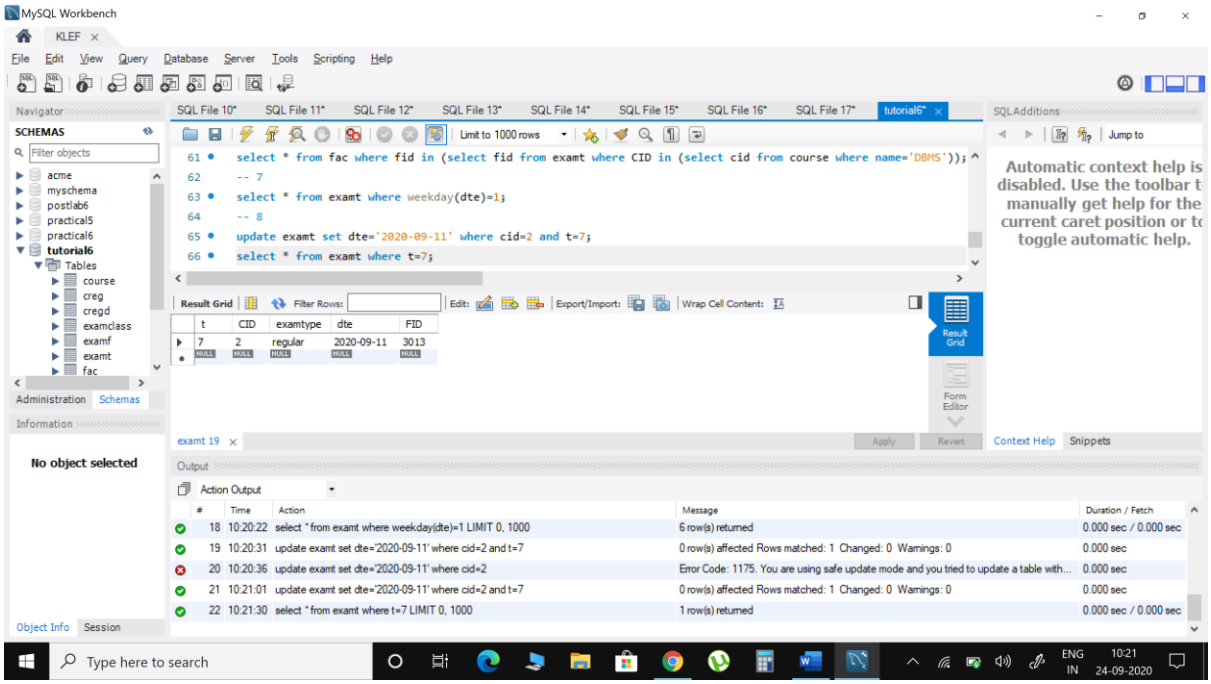
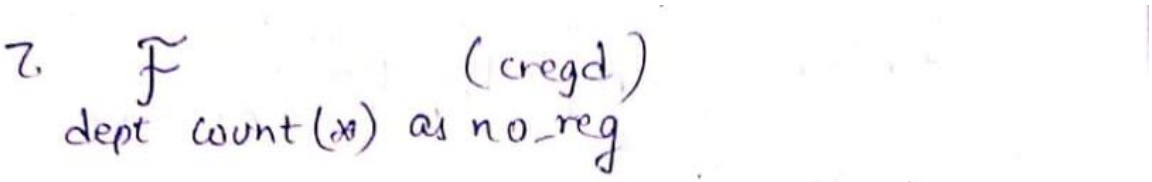
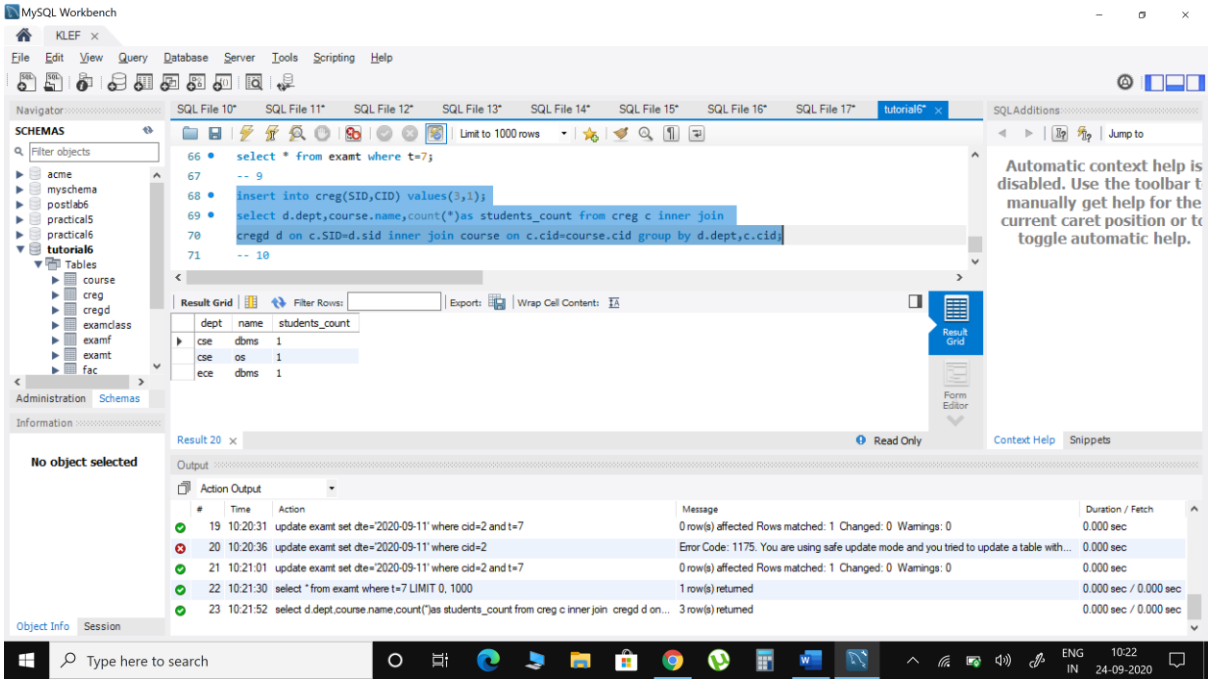


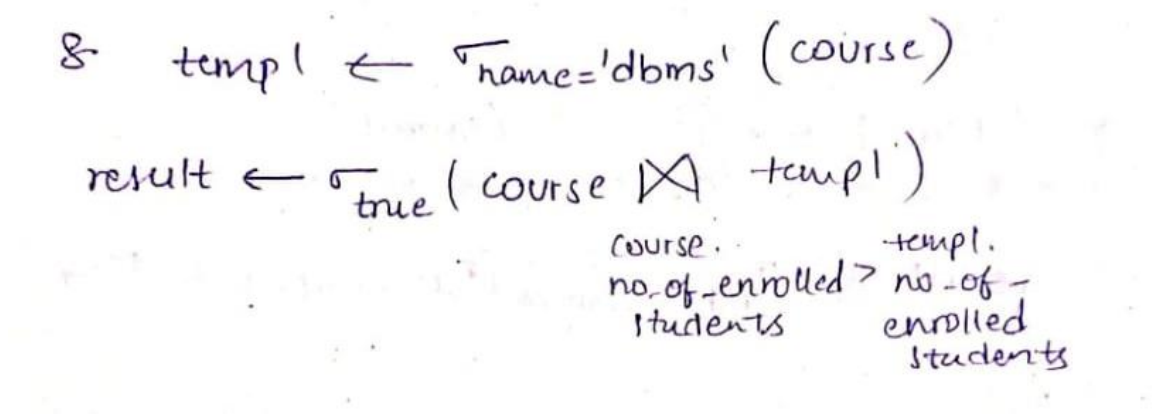
7) Give the no. of students enrolled in each course department-wise



select d.dept,course.name,count(*)as students_count from creg c inner join cregd d on c.SID=d.sid inner join course on c.cid=course.cid group by d.dept,c.cid;



8) Display the course details where the enrolled students are greater than the enrolled students in DBMS



select * from creg group by cid having count(*) > (select count(*) from creg where cid in (select cid from course where name='DBMS'));