

## LAB4

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Roll no-58

1. SELECT COUNT(ID),course\_id FROM takes GROUP BY course\_id;
2. SELECT COUNT(ID),course\_id FROM takes GROUP BY course\_id HAVING COUNT(ID) > 10;  
//no rows in smallrelations file
3. SELECT COUNT(course\_id), dept\_name FROM course GROUP BY dept\_name;
4. SELECT dept\_name, AVG(salary) FROM instructor GROUP BY dept\_name HAVING  
AVG(salary) > 42000;
5. SELECT COUNT(\*), sec\_id FROM takes WHERE semester = 'Spring' AND year = 2009 GROUP  
BY sec\_id;
6. SELECT course\_id FROM prereq ORDER BY course\_id;
7. SELECT \* FROM instructor ORDER BY salary DESC;
8. WITH saleperdept(dept\_sum, dept\_name) as (SELECT SUM(salary), dept\_name FROM  
instructor GROUP BY dept\_name)  
SELECT MAX(dept\_sum) FROM saleperdept;
9. WITH avgdep(avg\_name, avg\_sal) as (SELECT dept\_name, AVG(salary) FROM instructor  
GROUP BY dept\_name HAVING AVG(salary) > 42000)  
SELECT AVG(salary) FROM instructor, avgdep WHERE instructor.dept\_name =  
avgdep.avg\_name;
10. WITH enrollment\_persection(enroll, sec\_id) as (SELECT COUNT(\*), sec\_id FROM takes  
WHERE semester = 'Spring' AND year = 2010 GROUP BY sec\_id)  
  
SELECT MAX(enroll) FROM enrollment\_persection;
11. select person from (Select distinct t.Name as person from Instructor t, teaches s, takes m,  
student n where t.id=s.id and s.course\_id=m.course\_id and m.id = n.id and n.dept\_name =  
'Comp. Sci.');
12. WITH salary\_per\_department(count,avg\_salary, dept\_name) as (SELECT COUNT(\*),  
AVG(SALARY) ,DEPT\_NAME FROM instructor GROUP BY dept\_NAME having count(\*)>5)  
  
SELECT avg\_salary,dept\_name from salary\_per\_department where avg\_salary>50000 ;  
  
//No rows
13. With max\_budget(value) as (select max(budget) from department)  
  
Select budget from department, max\_budget where department.budget=max\_budget.value;

14. with dept\_total (dept\_name, value) as (select dept\_name, sum(salary) from instructor group by dept\_name), dept\_total\_avg(value) as (select avg(value) from dept\_total) select dept\_name from dept\_total, dept\_total\_avg where dept\_total.value >= dept\_total\_avg.value;
15. with r1 (sec\_id,num\_st) as (select sec\_id,count(id) from takes where semEster='Fall' and year=2009 group by sec\_id),  
r2(value) as (select max(num\_st) from r1)  
select sec\_id,num\_st from r1,r2 where num\_st>=value;
16. with summation as (select sum(tot\_cred) a,dept\_name from student group by dept\_name) select dept\_name,a from summation where a>(select a from summation where dept\_name='Finance');
17. Delete from instructor where dept\_name = 'Finance';
18. Delete from course where dept\_name='Comp. Sci.';
19. Update student  
set dept\_name = 'IT';  
Where dept\_name = 'Comp. Sci';
20. Update instructor set salary=salary\*1.03 where salary>100000;  
Update instructor set salary=salary\*1.05 where salary<=100000;
21. Insert into student  
Select ID,name,dept\_name,0 from instructor;
22. Delete from instructor where salary < (Select avg(salary) from instructor);