

1. Select d.department_name, count(i.department_name) as total_professors from department as d,instructor as i where i.department_name = d.department_name group by department_name;
2. Select p.i_id , p.name, p.department_name, p.salary from instructor as p,instructor as q where p.department_name = q.department_name group by q.department_name having p.salary < (0.35*max(q.salary));
3. Select count (*) as num_instructors from department as d1, instructor as i, department as d2 where d1.department_name = i.department_name and d2.department_name='MTH' and d2.building = d1.building;
4. Select distinct course_id from section where semester = 'fall' and years = 2009 and course_id in (select course_id from section where semester = 'spring' and years = '2010');
5. Select department_name,max(salary),min(salary),avg(salary) from instructor group by department_name;
6. select i_id from teaches where sec_id in(select sec_id from section where building in(select building from department where department_name='CHM'));
7. select d.department_name,d.budget from department as d,instructor as i where i.department_name=d.department_name group by department_name having avg(salary)>90000;

