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CS313 - Lab 4

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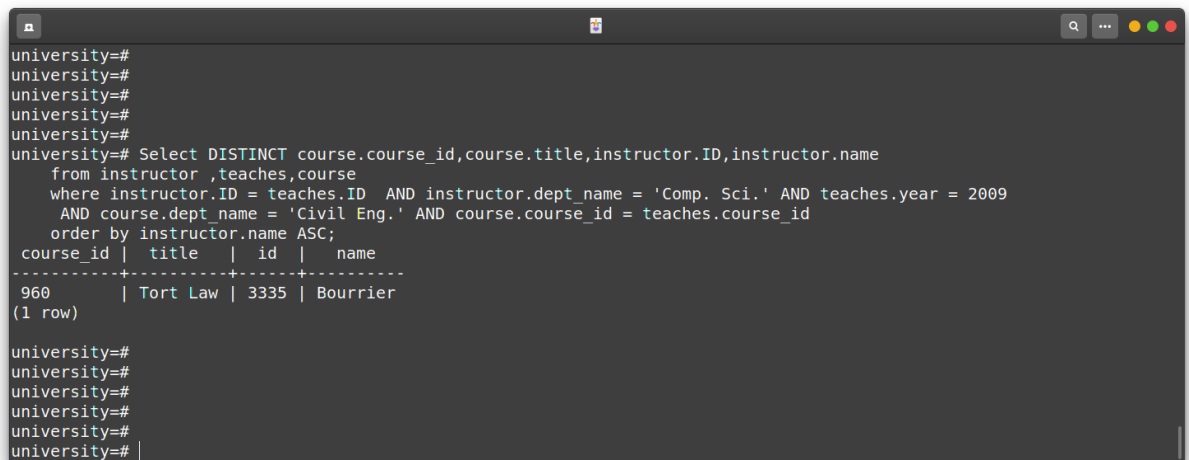## Q.1

8. a) Find the course id, title, instructor id and name of those instructors who are from CSE department but are teaching a course of Civil department in the year 2009. Arrange results in ascending order of instructor names.

Select DISTINCT course.course_id,course.title,instructor.ID,instructor.name
  from instructor ,teaches,course
  where instructor.ID = teaches.ID AND instructor.dept_name = 'Comp. Sci.'
  AND teaches.year = 2009 AND course.dept_name = 'Civil Eng.' AND
  course.course_id = teaches.course_id
  order by instructor.name ASC;

```
university=#
university=#
university=#
university=#
university=#
university=# Select DISTINCT course.course_id,course.title,instructor.ID,instructor.name
   from instructor ,teaches,course
   where instructor.ID = teaches.ID  AND instructor.dept_name = 'Comp. Sci.' AND teaches.year = 2009
    AND course.dept_name = 'Civil Eng.' AND course.course_id = teaches.course_id
   order by instructor.name ASC;
 course_id |  title   |  id  |   name
-----------+----------+------+----------
 960       | Tort Law | 3335 | Bourrier
(1 row)

university=#
university=#
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```
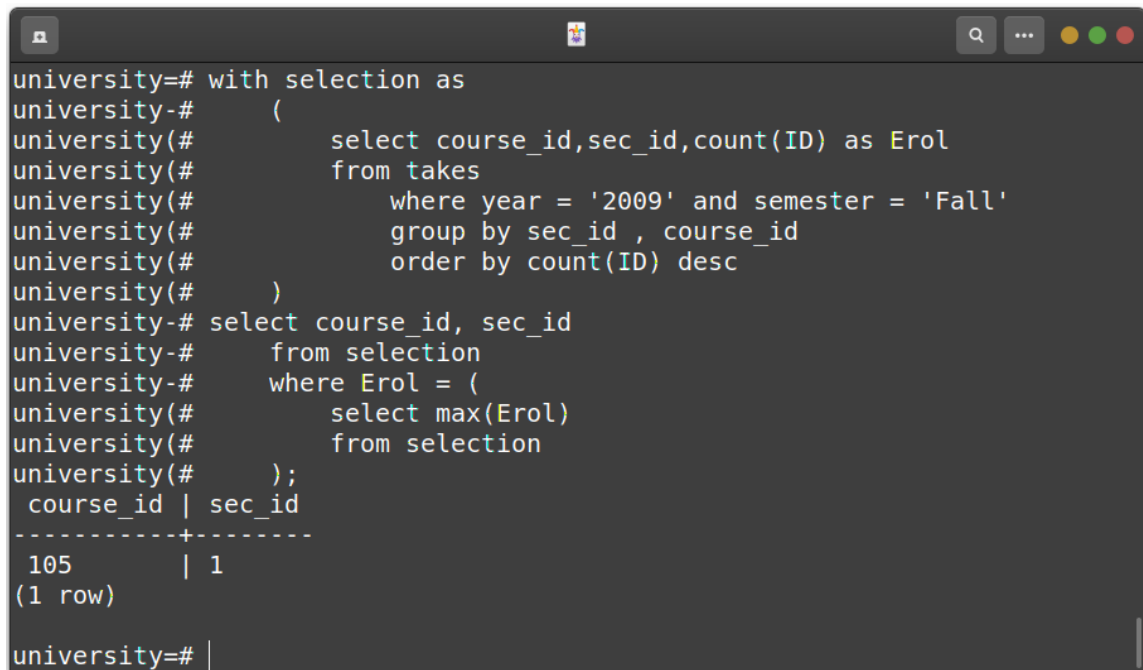
Output :

Course_id	title	id	name
960	Tort Law	3335	Bourrier

(1 row)

Q.2 Find the sections that had the maximum enrollment in Fall 2009.The result should display course_id and sec_id.

```
with selection as
    (
        select course_id,sec_id,count(ID) as Erol
        from takes
            where year = '2009' and semester = 'Fall'
            group by sec_id , course_id
            order by count(ID) desc
    )
select course_id, sec_id
    from selection
    where Erol = (
        select max(Erol)
        from selection
    );
```

```
university=# with selection as
university-#    (
university(#           select course_id,sec_id,count(ID) as Erol
university(#           from takes
university(#               where year = '2009' and semester = 'Fall'
university(#               group by sec_id , course_id
university(#               order by count(ID) desc
university(#    )
university-# select course_id, sec_id
university-#     from selection
university-#     where Erol = (
university(#           select max(Erol)
university(#           from selection
university(#     );
 course_id | sec_id
-----------+--------
 105       | 1
(1 row)

university=#
```

Output :

```
Course_id    |    sec_id
-------------------+---------------------
    105          |      1
(1 row)
```