Brandon Machtemes
Hodo Ibrahim
Cindy Chen
Daniel Kouassi

Metro State University
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Class Assignment 2

Question 1

Write the following queries in SQL, using the university schema.

a. Create a new course "CS-001", titled "Weekly Seminar", with 0 credits.

insert into course values ('CS-001','Weekly Seminar',NULL,0)

b. Create a section of this course in Autumn 2009, with section id of 1.

insert into section values (cs-001,1,'autumn',2009,NULL,NULL)

c. Enroll every student in the Comp. Sci. department in the above section.

insert into takes(ID,course_id,sec_id,semester,year)

select ID, course_id,sec_id,semester,year

from student

where dept_name = 'Comp. Sci'

d. Delete enrollments in the above section where the student's name is Chavez.

delete from takes(ID,course_id,sec_id,semester,year)

select ID, course_id,sec_id,semester,year

from student

where name = 'Chavez'

e. Delete the course CS-001. What will happen if you run this delete statement without first deleting offerings (sections) of this course.

Delete from course

Where course_id = 'CS-001'

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If you run a delete statement to delete the course "CS-001" without first deleting the offerings (sections) of this course, the delete statement will likely result in an error or be prevented from executing by the database's referential integrity constraints.

f. Delete all takes tuples corresponding to any section of any course with the word "database" as a part of the title; ignore case when matching the word with the title.

Delete from takes
Where section_id in (
        Select section_id
        From section
        Where section like '%database%'

Question 2

Consider the relational database below.

employee (<u>employee name</u>, street, city)
works (<u>employee name</u>, company name, salary)
company (<u>company name</u>, city)
manages (<u>employee name</u>, manager name)

Give an expression in SQL for each of the following queries.

- Give all employees of First Bank Corporation a 10 percent raise.

    Update works
    Set salary = salary * 1.1
    Where company name = 'First Bank Corporation'

- Give all managers of First Bank Corporation a 10 percent raise.

    Update works
    Set salary = salary * 1.1
    Where employee name in(select manager name from manages)

    Where company name = 'First Bank Corporation

- Delete all tuples in the *works* relation for employees of Small Bank Corporation.

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Delete from works

Where company name = 'Small Bank Corporation'