**A:09**

1. Provide a list of students that have enrolled in a course that allowed them an opportunity to drop a lowest score.

**SELECT last\_name, first\_name**

**FROM student**

**WHERE student\_id IN**

**(SELECT e.student\_id**

**FROM enrollment e, section s**

**WHERE e.section\_id = s.section\_id**

**AND e.section\_id IN**

**(SELECT section\_id**

**FROM grade\_type\_weight**

**WHERE drop\_lowest = 'Y'))**

**ORDER BY last\_name;**

1. List the names and phone numbers of instructors who teach students that live in same zipcode as the instructor.

**SELECT i.last\_name, i.first\_name, i.phone**

**FROM instructor i, student s, section t, enrollment e**

**WHERE i.zip = s.zip**

**AND i.instructor\_id = t.instructor\_id**

**AND s.student\_id = e.student\_id**

**AND e.section\_id = t.section\_id**

**ORDER BY i.last\_name;**

1. Provide a list of names and cities of students and instructors that live in zipcode 10025. Identify each person's role as either "Student" or "Instructor". Sort the list by role, last name and first name.

**(SELECT s.last\_name AS "Last Name", s.first\_name AS "First Name", 'Student' AS ROLE, z.city**

**FROM student s, zipcode z**

**WHERE s.zip = z.zip**

**AND z.zip = 10025)**

**UNION**

**(SELECT i.last\_name AS "Last Name", i.first\_name AS "First Name", 'Instructor' AS ROLE, z.city**

**FROM instructor i, zipcode z**

**WHERE i.zip = z.zip**

**AND z.zip = 10025)**

**ORDER BY ROLE, "Last Name", "First Name";**

1. Create a query that lists location, number of sections taught in that location and number of students enrolled in courses at that location. Sort by location.

**SELECT location, COUNT(COURSES) AS COURSES, COUNT(STUDENTS) AS STUDENTS**

**FROM**

**((SELECT location, COUNT(course\_no) AS COURSES, NULL AS STUDENTS**

**FROM section**

**GROUP BY location, course\_no)**

**UNION ALL**

**(SELECT s.location AS location, NULL AS COURSES,**

**COUNT(e.section\_id) AS STUDENTS**

**FROM enrollment e, section s**

**WHERE e.section\_id = s.section\_id**

**GROUP BY s.location, e.section\_id))**

**GROUP BY location**

**ORDER BY location;**

1. Create a query that shows all of the individual grades for student 112 in section 95 and also the average of those grades. The individual grades should come first with the average at the bottom. List the grade type code and numeric grade. The average row should have a caption of, "Average for student 112".

**SELECT grade\_type\_code AS "Event Graded", numeric\_grade AS "Grade"**

**FROM grade**

**WHERE student\_id = 112**

**AND section\_id = 95**

**UNION ALL**

**SELECT 'Average Grade: Student #112', ROUND(AVG(numeric\_grade), 1)**

**FROM grade**

**WHERE student\_id = 112**

**AND section\_id = 95;**