

**Write the SQLs to be used in the following user scenarios:**

**A.**

1 professor and 3 students registered their accounts on this website. Write 4 INSERT statements for this scenario.

To insert the professor into the database:

```
INSERT INTO Account(id, account_type, email, password)
VALUES (1, 'professor', anthonyb@gmail.com, 'userpass1254');
```

To insert the first student into the database:

```
INSERT INTO Account(id, account_type, email, password)
VALUES (2, 'student', jakel@gmail.com, 'jlabpass');
```

To insert the second student into the database:

```
INSERT INTO Account(id, account_type, email, password)
VALUES(3, 'student', rosa21@gmail.com, 'rbasepass');
```

To insert the third student into the database:

```
INSERT INTO Account(id, account_type, email, password)
VALUES(4, 'student', 'liam@gmail.com', 'lpass123');
```

**B.**

The professor created a course and the 3 students enrolled in his course.

```
INSERT INTO Course(professor_id, name, description, start_date, end_date, id)
VALUES (1, 'Anthony Bates', 'Math 101', 'Introduction to College Algebra', '2023-08-22',
'2023-12-15', 1);
```

```
INSERT INTO StudentCourse(id, student_id, course_id, enrollment_date)
VALUES(1, 2, 1, '2023-07-01');
```

```
INSERT INTO StudentCourse(id, student_id, course_id, enrollment_date)
VALUES (2, 3, 1, '2023-07-10');
```

```
INSERT INTO StudentCourse(id, student_id, course_id, enrollment_date)
VALUES (3, 4, 1, '2023-07-05');
```

### C.

The professor then created 2 assignments (titles are Homework1, Homework2) for this course.

```
INSERT INTO Assignment(id, course_id, title, description, points, available_date, due_date)
VALUES (1, 1, 'Homework1', 'First Class Assignment', '100', '2023-09-10', '2023-09-21');
```

```
INSERT INTO Assignment(id, course_id, title, description, points, available_date, due_date)
VALUES (2, 1, 'Homework2', 'Second Class Assignment', '100', '2023-9-27', '2023-10-06');
```

### D.

One student (randomly choose any student) submitted twice for Homework1 and left a comment.

First Submission:

```
INSERT INTO StudentAssignment (student_id, assignment_id, id)
VALUES (2,1,1);
```

```
INSERT INTO Submission(id, studentassignment_id, content ,create_time)
VALUES (1, 1, 'Homework One: First Submission', '2023-09-12 10:15:35');
```

Second Submission:

```
INSERT INTO StudentAssignment (student_id, assignment_id, id)
VALUES (2,1,2);
```

```
INSERT INTO Submission(id, studentassignment_id, content ,create_time)
VALUES (2,1, 'Homework One: Second Submission', '2023-09-14 09:10:25');
```

```
INSERT INTO Comment(id, account_id, studentassignment_id, content, create_time)
VALUES(1,2,1, 'I made a second submission', '2023-09-14 09:12:40');
```

```
INSERT INTO Email(id, comment_id, title, body, recipient, send_status, last_send_time)
VALUES(1,1, 'Assignment Comment', 'I made a second submission', 'anthonyb@gmail.com',
'Sent', '2023-09-14 09:12:55');
```

### E.

1) He first navigated to the course's assignment management page (write a SELECT statement listing the assignments in this course).

```
SELECT*
FROM Assignment
WHERE course_id=1;
```

2) He then navigated to Homework1's StudentAssignment page (write a SELECT statement listing the StudentAssignments for Homework1; in this case, it's supposed to return only one result as only one of the student had ever submitted/commented).

```
SELECT *  
FROM StudentAssignment  
WHERE assignment_id=1;
```

3) He then navigated to the student's (who submitted twice for Homework1) StudentAssignment page for Homework1.

i) Write a SELECT statement listing the submissions for this StudentAssignment.

```
SELECT*  
FROM Submission  
WHERE studentassignment_id=1 AND id=2;
```

Or another way of writing this:

```
SELECT*  
FROM Submission  
INNER JOIN StudentAssignment ON Submission.id=StudentAssignment.id  
WHERE StudentAssignment.student_id=2 AND StudentAssignment.assignment_id=1;
```

ii) Write another SELECT statement listing the comments for this StudentAssignment.

```
SELECT*  
FROM Comment  
WHERE account_id=2 AND StudentAssignment_id=1;
```

## F.

The professor graded this student's Homework1 and also left a comment.

```
UPDATE StudentAssignment(grade,grade_time)  
SET grade=100, grade_time='2023-09-16 11:15:21'  
WHERE student_id=2;
```

```
INSERT INTO Comment(id, account_id, studentassignment_id,content, create_time)  
VALUES (2,2,1, 'Well done on your assignment!', '2023-09-16 11:15:21');
```

```
INSERT INTO Email(id, comment_id, title, body, recipient, send_status, last_send_time)  
VALUES(2,2, 'Assignment Feedback', 'Well done on your assignment', jakel@gmail.com,  
'Sent', '2023-09-16 11:15:21');
```