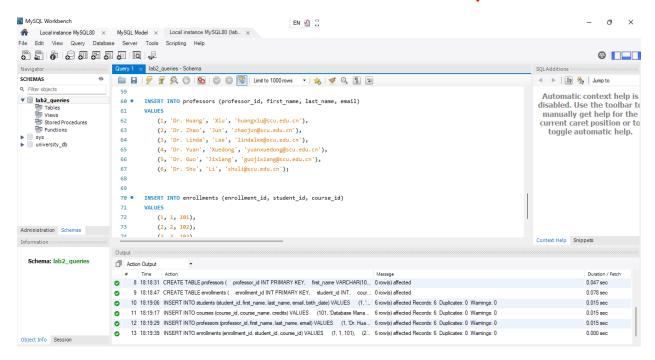
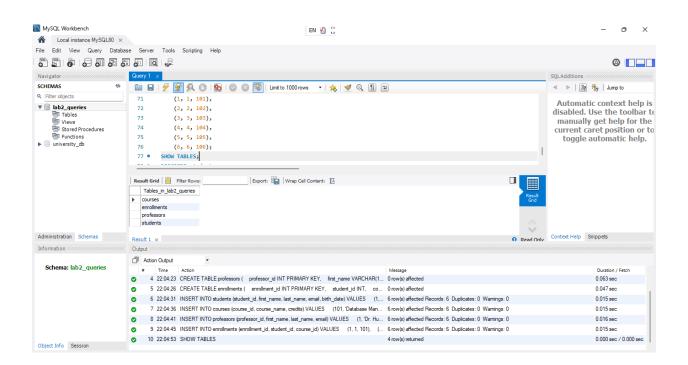
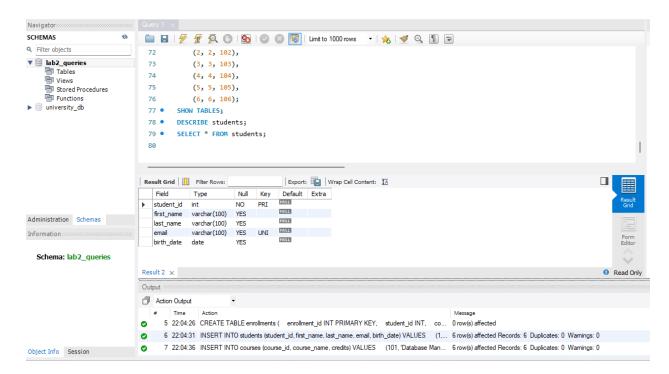
# Screenshots of the code and outputs:

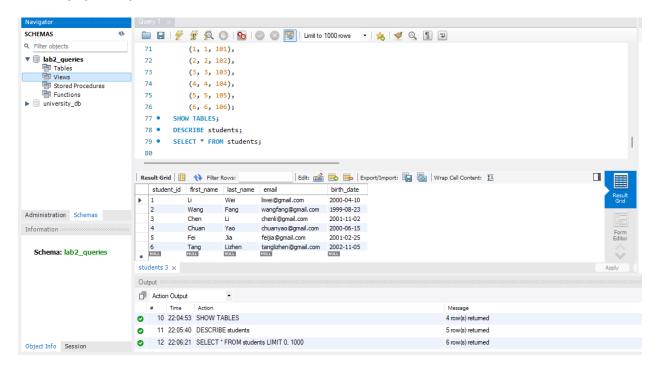


#### TABLES:

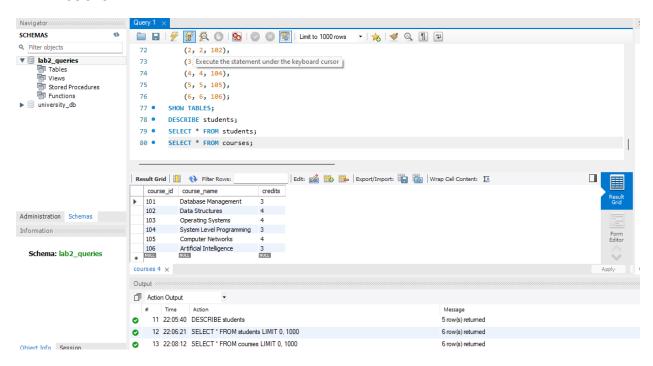




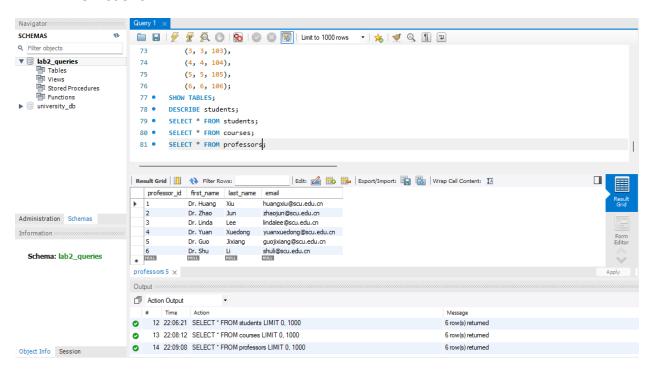
# • STUDENTS TABLE:



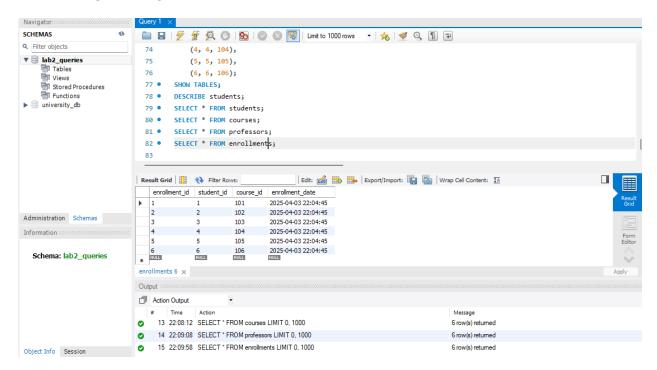
#### COURSE TABLE:



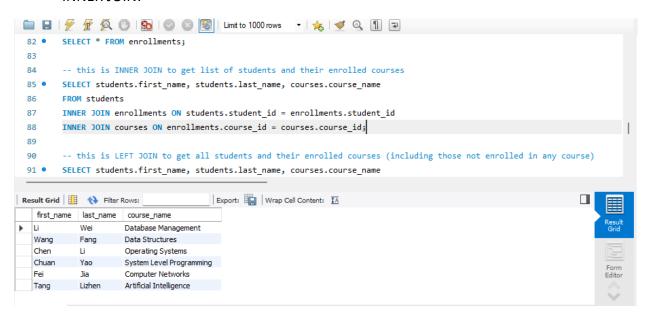
#### PROFESSORS TABLE:



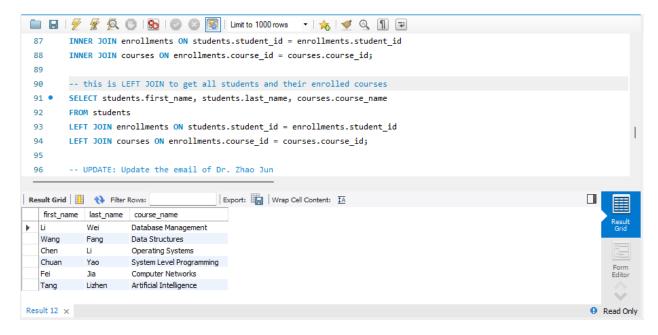
#### ENROLLMENTS TABLE:



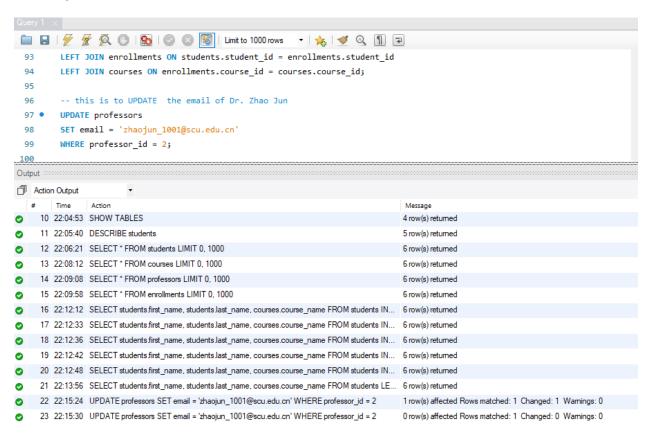
#### • INNER JOIN:



## • LEFT JOIN:



#### UPDATE:



#### DELETE:

```
-- DELETE this is to remove enrollment for student with student_id = 3
 102 • DELETE FROM enrollments
           WHERE student_id = 3;
104
Output :
Action Output
        Time
                  Action
                                                                                                  Message
   15 22:09:58 SELECT * FROM enrollments LIMIT 0, 1000
                                                                                                  6 row(s) returned
o 16 22:12:12 SELECT students.first_name, students.last_name, courses.course_name FROM students IN... 6 row(s) returned
   17 22:12:33 SELECT students first_name, students last_name, courses.course_name FROM students IN... 6 row(s) returned
0
22:12:36 SELECT students first_name, students last_name, courses.course_name FROM students IN... 6 row(s) returned
19 22:12:42 SELECT students first_name, students last_name, courses.course_name FROM students IN... 6 row(s) returned
20 22:12:48 SELECT students.first_name, students.last_name, courses.course_name FROM students IN... 6 row(s) returned
21 22:13:56 SELECT students first_name, students last_name, courses.course_name FROM students LE... 6 row(s) returned
22 22:15:24 UPDATE professors SET email = 'zhaojun_1001@scu.edu.cn' WHERE professor_id = 2 1 row(s) affected Rows matched: 1 Changed: 1 Warnings: 0
23 22:15:30 UPDATE professors SET email = 'zhaojun_1001@scu.edu.cn' WHERE professor_id = 2
                                                                                                 0 row(s) affected Rows matched: 1 Changed: 0 Warnings: 0
24 22:16:48 DELETE FROM enrollments WHERE student_id = 3
                                                                                                 1 row(s) affected
```

### AGGREGATION:

```
104
105
        -- Aggregation to count the number of students enrolled per course
106 • SELECT courses.course_name, COUNT(enrollments.student_id) AS student_count
       FROM courses
108
       LEFT JOIN enrollments ON courses.course_id = enrollments.course_id
       GROUP BY courses.course_name
110
       HAVING COUNT(enrollments.student_id) > 1;
Export: Wrap Cell Content: IA
 course_name student_count
Result 13 ×
                                                                                                              Read Only
```

```
-- Subquery to get students who are NOT enrolled in any course

SELECT first_name, last_name
FROM students

WHERE student_id NOT IN (

SELECT student_id

FROM enrollments

);
| Export: | | Wrap Cell Content: IA

    Read Only
```