

WCT II – Assignment

ITE (M2)

Name: Ry Kimchhay

1. Retrieve all students who enrolled in a specific course.

```
69 • SELECT students.student_id, students.first_name, students.last_name
70 FROM students
71 JOIN enrollments ON students.student_id = enrollments.student_id
72 WHERE enrollments.course_id = (SELECT course_id FROM courses WHERE course_code = 'CS101');
73
```

student_id	first_name	last_name
1	Ammara	Ry
2	Gechoung	Sor

Explanation:

- This query finds students who are enrolled in the course "CS101".
- It joins the students table with the enrollments table using student_id.
- It filters the results to only show students who are in the course with code "CS101".

2. Find all faculty members in a particular department.

```
75 • SELECT faculty_id, first_name, last_name
76 FROM faculty
77 WHERE department_id = (SELECT department_id FROM departments WHERE department_name = 'Computer Science');
78
79
```

faculty_id	first_name	last_name
1	Kimchhay	Ry

Explanation:

- This query finds all faculty members in the Computer Science department.
- It selects the faculty members where department_id matches the department_id of "Computer Science" in the departments table.

3. List all courses a particular student is enrolled in.

```
80 • SELECT courses.course_code, courses.course_name
81 FROM courses
82 JOIN enrollments ON courses.course_id = enrollments.course_id
83 WHERE enrollments.student_id = (SELECT student_id FROM students WHERE email = 'Ammara@gmail.com');
84
85
```

course_code	course_name
CS101	Introduction to Programming
MATH201	Calculus II

Explanation:

- This query finds all courses that Ammara Ry is enrolled in.
- It joins the courses table with the enrollments table using course_id.
- It filters the results to show only courses where the student_id matches the one belonging to the student with the email "Ammara@gmail.com".

4. Retrieve students who have not enrolled in any course

```
86 • SELECT * FROM students
87 WHERE student_id NOT IN (SELECT DISTINCT student_id FROM enrollments);
88
89
```

student_id	first_name	last_name	date_of_birth	email
3	Sophe	Chan	2003-07-25	Sophe@gmail.com
4	Dara	Kong	2000-12-05	Dara@gmail.com

Explanation:

- This query finds students who haven't enrolled in any course.
- The subquery (SELECT DISTINCT student_id FROM enrollments) gets all students who have enrolled in at least one course.
- The main query selects students whose student_id is not in that list.

5. Find the average grade of students in a specific course.

```
90 • SELECT AVG(grade) AS average_grade
91 FROM enrollments
92 WHERE course_id = (SELECT course_id FROM courses WHERE course_code = 'CS101');
93
```

Result Grid	Filter Rows:	Export:	Wrap Cell Contents
average_grade			
3.650000			

Explanation:

- This query calculates the average grade of students in CS101.
- The subquery finds the course_id of "CS101".
- The main query gets the average AVG() of all grades from students in that course.