

MySQL (Day2):

1	<p>Display the <u>full name (first, last)</u> of the student with <u>his grade</u>.</p> <p><i>if his grade is greater than 85% Excellent, from 75% to 85% Very good, from 65% to 75% Good and from 55% to 65% pass otherwise will be graded as failed.</i></p>
	<pre> SELECT CONCAT(s.first_name, ' ', s.last_name) AS full_name, -> CASE -> WHEN sc.grade > 85 THEN 'Excellent' -> WHEN sc.grade > 75 AND sc.grade <= 85 THEN 'Very good' -> WHEN sc.grade > 65 AND sc.grade <= 75 THEN 'Good' -> WHEN sc.grade > 55 AND sc.grade <= 65 THEN 'Pass' -> ELSE 'Failed' -> END AS grade_level -> FROM students s -> JOIN students_courses sc ON s.student_id = sc.student_id; </pre>
2	<p>Display the <u>capitalized last name</u>, and the <u>grade</u>, if he has no grade display the keyword <u>absent</u>. [using ifNULL function]</p>
	<pre> SELECT UPPER(s.last_name) AS capitalized_last_name, -> IFNULL(sc.grade, 'absent') AS grade -> FROM students s -> LEFT JOIN students_courses sc ON s.student_id = sc.student_id; </pre>
3	<p>Display <u>students' names</u>, <u>course name</u> along with their grades.</p>
	<pre> SELECT CONCAT(students.first_name, ' ', students.last_name) AS student_name, -> courses.course_name, -> students_courses.grade -> FROM students -> INNER JOIN students_courses ON students.student_id = students_courses.student_id -> INNER JOIN courses ON students_courses.course_id = courses.course_id; </pre>

4	<i>For each course, display the <u>course name</u>, <u>min grade</u>, <u>max grade</u>, <u>average grade</u>, <u>number of attended students</u>.</i>
	<pre> SELECT c.course_name, -> MIN(sc.grade) AS min_grade, -> MAX(sc.grade) AS max_grade, -> AVG(sc.grade) AS avg_grade, -> COUNT(sc.student_id) AS num_attended_students -> FROM courses c -> JOIN students_courses sc ON c.course_id = sc.course_id -> GROUP BY c.course_name; </pre>
5	<i>Use subquery to display the <u>names of the students</u> who were born before student no 1.</i>
	<pre> SELECT CONCAT(students.first_name, ' ', students.last_name) AS student_name -> FROM students -> WHERE birth_date < (SELECT birth_date FROM students WHERE student_id = 1); </pre>
6	<i>Use subquery to display the <u>data of all the courses</u> with a credit hour similar to MySQL's credit hours</i>
	<pre> SELECT * -> FROM courses -> WHERE credit_hour = (SELECT credit_hour FROM courses WHERE course_name = 'MySQL'); </pre>