

# MySQL Labs

## MySQL (Day3):

### BY"AYA EID

1	<b>Update students courses table, set the registration date value to "Today";</b>
	<pre>MariaDB [os2]&gt; update students_courses set reg_date=now() ; Query OK, 6 rows affected, 6 warnings (0.078 sec) Rows matched: 6 Changed: 6 Warnings: 6  MariaDB [os2]&gt; select * from students_courses ; +-----+-----+-----+-----+   student_id   course_id   grade   reg_date   +-----+-----+-----+-----+   1   1   80   2022-12-01     1   2   90   2022-12-01     1   3   100   2022-12-01     2   2   99   2022-12-01     2   3   80   2022-12-01     3   4   70   2022-12-01   +-----+-----+-----+-----+ 6 rows in set (0.000 sec)</pre>
2	<b>Display the registration date in the following format:</b> <b>Day, month/ year</b>
	<pre>MariaDB [os2]&gt; SELECT -&gt; student_id , course_id , -&gt; DATE_FORMAT(reg_date,'%d, %M/ %Y') -&gt; as reg_date -&gt; FROM students_courses ; +-----+-----+-----+   student_id   course_id   reg_date   +-----+-----+-----+   1   1   01, December/ 2022     1   2   01, December/ 2022     1   3   01, December/ 2022     2   2   01, December/ 2022     2   3   01, December/ 2022     3   4   01, December/ 2022   +-----+-----+-----+ 6 rows in set (0.011 sec)</pre>
r	<b>Display the <u>capitalized last name</u>, and the <u>grade</u>, if he has no grade display the keyword <u>absent</u>. [using if NULL function]</b>
	<pre>MariaDB [os2]&gt; SELECT UPPER(last_name) as last_name, IFNULL(grade, "absent") as grade -&gt; FROM students -&gt; LEFT JOIN students_courses -&gt; ON students.student_id = students_courses.student_id ; +-----+-----+   last_name   grade   +-----+-----+   ALY   80     ALY   90     ALY   100     IBRAHIM   99     IBRAHIM   80     OSSAMA   70     KHALED   absent     KHALIL   absent   +-----+-----+ 8 rows in set (0.000 sec)</pre>
£	<b>Display <u>students' names</u>, <u>course name</u> along with their grades.</b>

<div>+-</div>	<pre> MariaDB [os2]&gt; select concat(first_name,last_name) as name ,course_name,grade -&gt; from students s,courses c,students_courses sc -&gt; where s.student_id=sc.student_id -&gt; and c.course_id=sc.course_id ; +-----+-----+-----+   name   course_name   grade   +-----+-----+-----+   AhmedAly   Database   80     AhmedAly   C   90     AhmedAly   Network   100     AhmedIbrahim   C   99     AhmedIbrahim   Network   80     Ahmed Ossama   OS   70   +-----+-----+-----+ 6 rows in set (0.184 sec)  MariaDB [os2]&gt; </pre>	
<div>o</div>	<p><b><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></b></p>	
	<pre> MariaDB [os2]&gt; select course_name,min(grade),max(grade),avg(grade),count(course_name) -&gt; from courses c,students_courses cs -&gt; where c.course_id=cs.course_id -&gt; group by course_name ; +-----+-----+-----+-----+-----+   course_name   min(grade)   max(grade)   avg(grade)   count(course_name)   +-----+-----+-----+-----+-----+   C   90   99   94.5000   2     Database   80   80   80.0000   1     Network   80   100   90.0000   2     OS   70   70   70.0000   1   +-----+-----+-----+-----+-----+ 4 rows in set (0.001 sec) </pre>	
<div>1</div>	<p><b><i>Use subquery to display the <u>names of the students</u> who were born before student no 1.</i></b></p>	
	<pre> MariaDB [os2]&gt; select concat(first_name,last_name) as name from students -&gt; where birth_date &lt;(select birth_date from students where student_id=1); +-----+   name   +-----+   AhmedIbrahim     HodaKhaled   +-----+ 2 rows in set (0.001 sec) </pre>	
<div>✓</div>	<p><b><i>Use subquery to display the <u>data of all the courses</u> with a <u>credit hour</u> similar to MySQL's credit hours</i></b></p>	
	<pre> on for the right syntax to use near 'MySQL credit hours' at line 1 MariaDB [os2]&gt; select student_id,c.course_id,course_name,credit_hour,grade,reg_date -&gt; from courses c,students_courses sc -&gt; where c.course_id=sc.course_id -&gt; and credit_hour=(select credit_hour from courses where course_name="MySQL") ; +-----+-----+-----+-----+-----+-----+   student_id   course_id   course_name   credit_hour   grade   reg_date   +-----+-----+-----+-----+-----+-----+   1   1   Database   2   80   2022-12-01   +-----+-----+-----+-----+-----+-----+ 1 row in set (0.141 sec) </pre>	