**MySQL Labs**

**MySQL (Day2):**

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| ***1*** | ***Update students courses table, set the registration date value to “Today”;*** |
|  | UPDATE students\_courses  SET reg\_date = CURRENT\_DATE; |
| ***2*** | ***Display the registration date in the following format:***  ***Day, month/ year*** |
|  | SELECT DATE\_FORMAT(reg\_date , '%e , %M / %Y') AS time  FROM students\_courses; |
| ***3*** | ***Display the full name (first, last) of the student with his grade.***  ***if his garde 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.*** |
|  | SELECT  CONCAT\_WS(' ',s.first\_name,s.last\_name) AS 'full name',  IF (sc.grade>=85, "Excellent",  IF (sc.grade>=75, "Verygood",  IF (sc.grade>=65, "good",  IF (sc.grade>=55, "pass",  IF (sc.grade<55, "failed" ,"")  )))) AS grade  FROM students s , students\_courses sc  WHERE s.student\_id = sc.student\_id; |
| ***4*** | ***Display the capitalized last name , and the grade , if he has no grade display the keyword absent. [using ifNULL function]*** |
|  | SELECT UCASE(s.last\_name),IFNULL(sc.grade,"absent") FROM students s left join students\_courses sc on s.student\_id = sc.student\_id ; |
| ***5*** | ***Display students' names, course name along with their grades.*** |
|  | select s.first\_name , s.last\_name , sc.grade from students s , students\_courses sc where s.student\_id = sc.student\_id; |
| ***6*** | ***For each course, display the course name, min grade, max grade, average grade, number of attended students.*** |
|  | select c.course\_name , min(sc.grade), max(sc.grade), avg(sc.grade) from courses c , students\_courses sc where c.course\_id = sc.course\_id group by c.course\_name; |
| ***7*** | ***Use subquery to display the names of the students who were born before student no 1.*** |
|  | select first\_name , last\_name from students where birth\_date < (select birth\_date from students where student\_id = 1); |
| ***8*** | ***Use subquery to display the data of all the courses with a credit hour similar to MySQL's credit hours*** |
|  | select \* from courses where credit\_hour = ( select credit\_hour from courses where course\_name = 'MySQL'); |
| ***10*** | ***Create a view called female\_students\_vu to display all the female students*** |
|  | create view female\_students\_vu as select \* from students where gender = 'female'; |
| ***11*** | ***Try to insert a male student through your view*** |
|  | update female\_students\_vu set gender = 'male' where student\_id = 4; |
| ***12*** | ***Select all the data from your view and then from the students table*** |
|  | select \* from female\_students\_vu;  select \* from students; |
| ***13*** | ***Prevent the ability to insert another male student through you view*** |
|  |  |
| ***14*** | ***Use the information schema to display the table name , schema and the updatability of the female\_students\_vu view*** |
|  |  |
| ***15*** | ***Use the information schema to display the create time, table\_rows, auto\_increment, and the comments on the students table.*** |
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| ***16*** | ***Create a nonunique index on the foreign key column (COURSE\_ID) in the students\_courses table.*** |
|  | create index forgein\_index on students\_courses(course\_id); |
| ***17*** | ***Create a user with your name and give him the privilege to access the grades database*** |
|  | create user 'rana'@'localhost' identified by 'rana';  grant all on grades.\* to rana identified by 'rana' ; |
| ***18*** | ***Connect to mysql using the user you created and try to insert one record in the courses table.*** |
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| ***19*** | ***Change your password.*** |
|  | set password = password('rana'); |
| ***20*** | ***Show your privileges.*** |
|  | show grants; |