**MySQL Labs**

**MySQL (Day2):**

|  |  |
| --- | --- |
| ***1*** | ***Update students courses table, set the registration date value to “Today”;*** |
|  |  |
| ***2*** | ***Display the registration date in the following format:***  ***Day, month/ year*** |
|  | ***select date\_format(reg\_date,'%d-%m/%Y') as registerationDate 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(first\_name,' ',last\_name) as fullname,grade,**  **case**  **when grade> 85 then 'Excellent'**  **when grade between 75 and 85 then 'very good'**  **when grade between 65 and 75 then 'good'**  **when grade between 55 and 65 then 'pass'**  **else 'failed'**  **end as grade\_value**  **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 UPPER(last\_name) as LastName, ifnull(grade,'absent') as grade from students s,students\_courses sc where s.student\_id=sc.student\_id ;*** |
| ***5*** | ***Display students' names, course name along with their grades.*** |
|  | ***select concat(first\_name,' ',last\_name) as FullName, course\_name,grade***  ***from students s,courses c, students\_courses sc***  ***where s.student\_id=sc.student\_id***  ***and c.course\_id=sc.course\_id ;*** |
| ***6*** | ***For each course, display the course name, min grade, max grade, average grade, number of attended students.*** |
|  | **select course\_name,max(grade),min(grade),avg(grade),count(s.student\_id)**  **from students s ,students\_courses sc,courses c**  **where s.student\_id=sc.student\_id**  **and sc.course\_id=c.course\_id**  **group by 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 as select \* from students where gender = 'female';*** |
| ***11*** | ***Try to insert a male student through your view*** |
|  | ***insert into `female\_students` (`student\_id`, `first\_name`,`last\_name`, `gender`) values('6','Youssef','Emad','male');*** |
| ***12*** | ***Select all the data from your view and then from the students table*** |
|  | ***select \* from female\_students;***  ***SELECT \* FROM php.students;*** |
| ***13*** | ***Prevent the ability to insert another male student through you view*** |
|  | ***alter view female\_students as select \* from students where gender = 'female' with check option;*** |
| ***14*** | ***Use the information schema to display the table name , schema and the updatability of the female\_students\_vu view*** |
|  | ***select TABLE\_NAME,TABLE\_SCHEMA,IS\_UPDATABLE from VIEWS where TABLE\_NAME='female\_students';*** |
| ***15*** | ***Use the information schema to display the create time, table\_rows, auto\_increment, and the comments on the students table.*** |
|  | ***Select CREATE\_TIME,TABLE\_ROWS,AUTO\_INCREMENT,TABLE\_COMMENT from TABLES where TABLE\_NAME='students';*** |
| ***16*** | ***Create a nonunique index on the foreign key column (COURSE\_ID) in the students\_courses table.*** |
|  | ***create index cid\_ind on students\_courses(course\_id);*** |
| ***17*** | ***Create a user with your name and give him the privilege to access the grades database*** |
|  | ***create user 'Omar' identified by '1234';***  ***grant all on grades.\* to 'Omar';*** |
| ***18*** | ***Connect to mysql using the user you created and try to insert one record in the courses table.*** |
|  | ***SYSTEM mysql –u Omar –p;***  ***insert into `courses` (`course\_id`, `course\_name`, `credit\_hour`) values('1','Database','2');***  ***CANT SEE COURSES*** |
| ***19*** | ***Change your password.*** |
|  | ***Alter user ‘Omar’ identfied by ‘iti43’;*** |
| ***20*** | ***Show your privileges.*** |
|  | ***show grants for 'Omar';*** |