|  |  |
| --- | --- |
| ***1*** | ***Update students courses table, set the registration date value to “Today”;*** |
|  | ***update students\_course set reg\_date = CURDATE();*** |
| ***2*** | ***Display the registration date in the following format:***  ***Day, month/ year*** |
|  | ***select date\_format(reg\_date,'%d,%m/%yy' ) from students\_course;*** |
| ***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(s.first\_name, ' ', s.last\_name) as full\_name,**  **-> case**  **-> when c.grade >85 then 'excellent'**  **-> when c.grade >75 then 'very good'**  **-> when c.grade >65 then 'good'**  **-> when c.grade >55 then 'pass'**  **-> else ' failed'**  **-> end as GPA**  **-> from students as s , students\_courses as c**  **-> where s.student\_id = c.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(s.last\_name) as capital\_lastname, ifnull(c.grade,'absent')***  ***-> from students s , students\_courses c***  ***-> where s.student\_id = c.student\_id;*** |
| ***5*** | ***Display students' names, course name along with their grades.*** |
|  | **select s.first\_name , c.course\_name , g.grade**  **-> from students s, courses c, students\_courses g**  **-> where s.student\_id = g.student\_id and c.course\_id = g.course\_id;** |
| ***6*** | ***For each course, display the course name, min grade, max grade, average grade, number of attended students.*** |
|  | **select c.course\_name, min(g.grade), max(g.grade), avg(g.grade), count(g.student\_id)**  **-> from courses c, students\_courses g**  **-> where c.course\_id = g.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*** |
|  | ***insert into female\_students\_vu(student\_id,first\_name,last\_name,tel,email,gender,birth\_date)***  ***-> values(10,'anas','ali',011,'example@gmail.com','male',1/12/1997);*** |
| ***12*** | ***Select all the data from your view and then from the students table*** |
|  | ***select \* from students;***  ***select \* from female\_students\_vu;*** |
| ***13*** | ***Prevent the ability to insert another male student through you view*** |
|  | ***alter view female\_students\_vu***  ***-> 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 information\_schema.views where table\_name = 'female\_students\_vu';*** |
| ***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 information\_Schema.tables***  ***-> where table\_name = 'students';*** |
| ***16*** | ***Create a nonunique index on the foreign key column (COURSE\_ID) in the students\_courses table.*** |
|  | ***alter table students\_courses add index(course\_id);*** |

**MySQL Labs**

**MySQL (Day2):**