MySQL Labs

**MySQL (Day3):**

**insert into students\_courses**

**values**

**(1,4,60,NULL),**

**(2,1,NULL,NULL),**

**(2,4,75,NULL),**

**(3,1,NULL,NULL),**

**(3,2,NULL,NULL),**

**(3,3,75,NULL);**

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| *1* | ***Create function to calculate the number of students who get grade less than 80 in a certain exam (course id will be sent as a parameter)*** |
|  | Delimiter $  create function student\_no(c\_id integer)  returns int(5)  READS SQL DATA  DETERMINISTIC  begin  declare count integer;  set count = (select count(student\_id) from students\_courses  where course\_id=c\_id and grade < 80);  return count;  end$  delimiter ;  select student\_no(3); |
| *2* | ***Create stored procedure to display the names of the absence students of a certain courses.(Absent means has no grades)*** |
|  | Delimiter $  Create procedure display\_abscent()  Begin  Select concat(first\_name,' ',last\_name) as full\_name  From students s, students\_courses sc  Where s.student\_id=sc.student\_id and grade is NULL;  End$  Delimiter ;  call display\_abscent(); |
| *3* | ***Create stored procedure to calculate the average grades for certain course.*** |
|  | Delimiter $  Create procedure avg\_grades(c\_id integer)  Begin  Select avg(grade) from students\_courses where course\_id=c\_id;  End$  Delimiter ;  Call avg\_grades(4); |
| *4* | ***Create trigger to keep track the changes(updates) of the grades in the studnets\_courses table***  ***( create changes table with the following fields:***  ***id int primary key ,***  ***user varchar(30),***  ***action varchar(40),***  ***old\_grade int,***  ***new\_grade int,***  ***change\_date date).***  ***Test the trigger by updating grade int the “Students\_courses” table***  ***Confirm that the row is added in the” change\_table”*** |
|  | create trigger grades\_update  after update on students\_courses  for each row  insert into changes(user,action,old\_grade,new\_grade,change\_date)  values(user(), 'change grade',old.grade,new.grade,current\_time());  update students\_courses set grade=90 where student\_id=3;  select \* from changes; |
| *5* | ***Create event to delete the changes tables every 5 minute*** |
|  | create event delete\_changes  on schedule every 5 minute  do delete from changes; |