DBMS Lab Quiz

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SET - 01 :

a)Retrieve the names of all the courses taught by the Professors during the period 2001- 2004.
OutPut:

```
MariaDB [cs620_university_db]> select CourseName from course
    -> where CourseNumber
    -> IN  (select CourseNumber from section
    ->        where Year>=2001 and Year<=2004
    ->     );
+------------+
| CourseName |
+------------+
| OS         |
| DSA        |
| DMS        |
+------------+
3 rows in set (0.008 sec)
```

b)
Code :

```
create table Student_report (
    StudentNumber INT NOT NULL,
    SectionIdentifier INT NOT NULL,
    Marks INT NOT NULL
);


insert into Student_report(
    StudentNumber,
    SectionIdentifier
)
select StudentNumber,SectionIdentifier FROM grade_report;

update Student_report set marks = (mod(RAND()*100,10));
update Student_report set marks = 10*marks;
```

Output :

```
MariaDB [cs620_university_db]> update Student_report set marks = 10*marks;
Query OK, 7 rows affected (0.022 sec)
Rows matched: 8  Changed: 7  Warnings: 0

MariaDB [cs620_university_db]> select * from student_report;
+---------------+-------------------+-------+
| StudentNumber | SectionIdentifier | Marks |
+---------------+-------------------+-------+
|            15 |                 1 |    10 |
|            15 |                 2 |    60 |
|            15 |                 3 |    70 |
|            17 |                 4 |    90 |
|           154 |                 4 |    10 |
|            17 |                 5 |    90 |
|           154 |                 5 |    10 |
|            15 |                 6 |     0 |
+---------------+-------------------+-------+
8 rows in set (0.000 sec)
```

c)Create a trigger so that the total marks scored
by each student is automatically updated in the
result sheet whenever a record is inserted into
Student_Report.
students_result(StudentNumber,Totalmarks)

Code :

```
delimiter $$
create or replace trigger updation
before insert
on student_report for each row
begin
insert into student_result values(new.studentnumber,new.marks);
end
$$
delimiter ;
```

Output Screenshots:

```
MariaDB [cs620_university_db]> delimiter $$
MariaDB [cs620_university_db]> create or replace trigger updation
    -> before insert
    -> on student_report for each row
    -> begin
    -> insert into student_result values(new.studentnumber,new.marks);
    -> end
    -> $$
Query OK, 0 rows affected (0.020 sec)

MariaDB [cs620_university_db]> delimiter ;
MariaDB [cs620_university_db]>
```

d)

Code :

```
delimiter $$
create or replace function remark(studentno int)
returns varchar(255)
begin
declare remark_msg varchar(255);
declare major_sub varchar(255);
set major_sub = (select major from student where studentnumber =
studentno) ;
if major_sub = 'CS' then
    set  remark_msg = "Computer Science Engg";
else
    set remark_msg = "Electronics Engg";
end if;
return remark_msg;
end
$$
delimiter ;
```

Output

```
MariaDB [cs620_university_db]> select remark(15);
+-----------------------+
| remark(15)            |
+-----------------------+
| Computer Science Engg |
+-----------------------+
1 row in set (0.024 sec)
```