

## Group A - 7

**Problem Statement:** Write a Stored procedure namely `proc_Grade` for the categorization of student. If marks scored by students in examination is  $\leq 1500$  and marks  $\geq 990$  then student will be placed in distinction category. If marks scored are between 989 and 900, category is first class. If marks scored are between 899 and 825, category is higher second class.

Write a PL/SQL block for using procedure with above requirement.

`Stud_Marks(name,total_marks) Result(Roll,Name,Class).`

Write a function to find out total number of students in a given class.

### 1.Create Database:

```
mysql> desc Stud_Marks;
```

Field	Type	Null	Key	Default	Extra
Name	varchar(20)	YES		NULL	
Total_Marks	int(11)	YES		NULL	

```
mysql> desc Result;
```

Field	Type	Null	Key	Default	Extra
Roll	int(11)	YES		NULL	
Name	varchar(20)	YES		NULL	
Class	varchar(20)	YES		NULL	

### Query Answers:

#### 1. Create following tables

- `stud_marks(name, total_marks)`
- `result(roll, name, class)`

```
mysql> create table Stud_Marks(Name varchar(20),Total_Marks int);
```

```
mysql> create table Result(Roll int,Name varchar(20),Class  
varchar(20));
```

#### 2. Write a Stored Procedure namely `proc_Grade` for the categorization of student.

- If marks scored by students in examination is  $\leq 1500$  and marks  $\geq 990$  then student will be placed in Distinction category.
- If marks scored are between 989 and 900 category is First Class.
- If marks scored are between 899 and 925 category is Higher Second Class.

```
mysql> delimiter //
mysql> create procedure proc_Grade()
-> begin
-> update Result r inner join Stud_Marks sm on r.Name=sm.Name
-> set r.Class=case when sm.Total_Marks<=1500 and
sm.Total_Marks>=990 then 'Distinction'
-> when sm.Total_Marks<=989 and sm.Total_Marks>=900 then
'First_Class'
-> when sm.Total_Marks<=899 and sm.Total_Marks>=825 then
'Higher_Second_Class'
-> end
-> ;
-> end//
mysql>delimiter ;
```

```
mysql> call proc_Grade();
```

```
mysql> select * from Result;
+-----+-----+-----+
| Roll | Name      | Class                |
+-----+-----+-----+
| 37   | sanket    | Distinction          |
| 34   | Madhuri  | Distinction          |
| 46   | Rohan     | Higher_Second_Class |
| 35   | Raj       | First_Class          |
| 47   | Abhishek  | Higher_Second_Class |
+-----+-----+-----+
```

### 3. Write a function to find out total no of students in given class.

```
mysql> delimiter //
mysql> create function fun1(nme varchar(20))
-> returns int(20)
-> begin
-> declare tot int(20);
-> select count(*) into tot from Result where Result.Class=nme;
-> return tot;
-> end
-> //
mysql> delimiter ;
```

```
mysql> select fun1('Higher_Second_Class');
+-----+
| fun1('Higher_Second_Class') |
+-----+
| 2 |
+-----+
```