

Name: Saurav Muke
 Roll No: 31342
 Class : TE3

1.Procedure for Grade Calculation

```
create procedure calculateG(in sname varchar(20),in marks int(5))
begin
insert into Stud_Marks values(sname,marks);
if marks<0 then
signal sqlstate '45000' set message_text="Error";
if marks<=1500 and marks>=990 then
update Result set Class="Distinction" where Name=sname;
elseif marks<=989 and marks>=900 then
update Result set Class="First Class" where Name=sname;
elseif marks<=899 and marks>=825 then
update Result set Class="Higher Second" where Name=sname;
end if;
select concat("Done Successfully");
end;
```

2. Function for Grade Calculation

```
create function funcalcula(sname varchar(20),marks int(5)) returns CHAR(50)
DETERMINISTIC
begin
declare d varchar(50);
insert into Stud_Marks values(sname,marks);
if marks<0 then
signal sqlstate '45000' set message_text="Error";
if marks<=1500 and marks>=990 then
update Result set Class="Distinction" where Name=sname;
elseif marks<=989 and marks>=900 then
update Result set Class="First Class" where Name=sname;
elseif marks<=899 and marks>=825 then
update Result set Class="Higher Second" where Name=sname;
end if;
select Class into d from Result where Name=sname;
return d;
end;
```

Output:-

```
mysql> select * from Result;
```

```
+-----+-----+-----+
| Roll | name   | Class |
+-----+-----+-----+
| 3    | Sam    |       |
| 1    | Saurav |       |
| 2    | Shreyash |     |
+-----+-----+-----+
3 rows in set (0.00 sec)
```

```
mysql> call calculateG("Saurav",1499);
```

```
+-----+-----+
| concat("Done Successfully") |
+-----+-----+
| Done Successfully           |
+-----+-----+
1 row in set (0.14 sec)
```

Query OK, 0 rows affected (0.14 sec)

```
mysql> call calculateG("Shreyash",889);
```

```
+-----+
| concat("Done Successfully") |
+-----+
| Done Successfully           |
+-----+
1 row in set (0.01 sec)
```

Query OK, 0 rows affected (0.01 sec)

```
mysql> select * from Result;
```

```
+-----+
| Roll | name      | Class      |
+-----+
| 3    | Sam       |            |
| 1    | Saurav    | Distinction|
| 2    | Shreyash  | Higher Second|
+-----+
3 rows in set (0.00 sec)
```

```
mysql> select funcalcula("Sam" ,900);
```

```
+-----+
| funcalcula("Sam" ,900) |
+-----+
| First Class            |
+-----+
1 row in set (0.01 sec)
```

```
mysql> select * from Result;
```

```
+-----+
| Roll | name      | Class      |
+-----+
| 3    | Sam       | First Class|
| 1    | Saurav    | Distinction|
| 2    | Shreyash  | Higher Second|
+-----+
3 rows in set (0.00 sec)
```

```
mysql>
```