Group A - 5
Problem Statement:
Unnamed PL/SQL code block: Use of Control structure and Exception handling is mandatory. Write a PL/SQL block of code for the following requirements:-
Schema:
1. Borrower(Rollin, Name, DateofIssue, NameofBook, Status)
2. Fine(Roll_no,Date,Amt)

* Accept roll_no & name of book from user.
* Check the number of days (from date of issue), if days are between 15 to 30 then fine amount will be Rs 5per day.
* If no. of days>30, per day fine will be Rs 50 per day & for days less than 30, Rs. 5 per day.
* After submitting the book, status will change from I to R.
* If condition of fine is true, then details will be stored into fine table.

1.Create Database

```
mysql> desc Borrower_info;
+-------------+--------------+------+-----+---------+-------+
| Field       | Type         | Null | Key | Default | Extra |
+-------------+--------------+------+-----+---------+-------+
| Rollin      | int(11)      | YES  |     | NULL    |       |
| Name        | varchar(20)  | YES  |     | NULL    |       |
| DateofIssue | date         | YES  |     | NULL    |       |
| NameofBook  | varchar(100) | YES  |     | NULL    |       |
| Status      | varchar(10)  | YES  |     | NULL    |       |
+-------------+--------------+------+-----+---------+-------+

mysql> desc Fine_manager;
+--------+---------+------+-----+---------+-------+
| Field  | Type    | Null | Key | Default | Extra |
+--------+---------+------+-----+---------+-------+
| RollNo | int(11) | YES  |     | NULL    |       |
| Date   | date    | YES  |     | NULL    |       |
| Amount | double  | YES  |     | NULL    |       |
+--------+---------+------+-----+---------+-------+
```

2.Create Procedure

```
mysql> delimiter //
mysql> create procedure calc_Fine(IN RollNo int,IN BookName varchar(100))
    -> begin
    -> declare exit handler for not found select 'Enter appropriate
information';
    -> set @datediff=0;
    -> set @fineamt=0;
    -> select datediff(curdate(),DateofIssue) from Borrower_info where
Rollin=RollNo
       and NameofBook=BookName into @datediff;
    -> if @datediff >15 and @datediff <=30 then set @fineamt =
```

```
(@datediff-15)*5;
    -> elseif @datediff >30 then set @fineamt =
((15*5)+(@datediff-30)*50);
    -> else set @fineamt=0;
    -> end if;
    -> update Borrower_info set Status="R" where Rollin=RollNo and
       NameofBook=BookName;
    -> insert into Fine_manager values(RollNo,curdate(),@fineamt);
    -> end//
```

```
mysql> select * from Borrower_info;
+--------+-----------+------------+----------------------+--------+
| Rollin | Name      | DateofIssue | NameofBook          | Status |
+--------+-----------+------------+----------------------+--------+
|    101 | Amit      | 2017-09-01 | Hobbit:TFOR          | I      |
|    102 | Suraj     | 2017-08-25 | Clash of Kings       | I      |
|    103 | Nikhil    | 2017-08-05 | The Man With Qualities | I    |
|    104 | Akshay    | 2017-08-17 | Entrepreneurship     | I      |
+--------+-----------+------------+----------------------+--------+
```

```
mysql> select * from Fine_manager;
Empty set (0.00 sec)
```

3.Handling Exception here

```
mysql> call calc_Fine(1001,"Hobbit");
+------------------------------+
| Enter appropriate information |
+------------------------------+
| Enter appropriate information |
+------------------------------+
```

4.Call to Procedure

```
mysql> call calc_Fine(101,"Hobbit:TFOR");
mysql> call calc_Fine(102,"Clash of Kings");
mysql> call calc_Fine(103,"The Man With Qualities");
mysql> call calc_Fine(104,"Entrepreneurship");
```

```
mysql> select * from Borrower_info;
+--------+-----------+------------+----------------------+--------+
| Rollin | Name      | DateofIssue | NameofBook          | Status |
+--------+-----------+------------+----------------------+--------+
|    101 | Amit      | 2017-09-01 | Hobbit:TFOR          | R      |
|    102 | Suraj     | 2017-08-25 | Clash of Kings       | R      |
|    103 | Nikhil    | 2017-08-05 | The Man With Qualities | R    |
|    104 | Akshay    | 2017-08-17 | Entrepreneurship     | R      |
```

```
+--------+-----------+------------+----------------------+--------
+

mysql> select * from Fine_manager;
+--------+-----------+--------+
| RollNo | Date      | Amount |
+--------+-----------+--------+
|    101 | 2017-09-16 |      0 |
|    102 | 2017-09-16 |     35 |
|    103 | 2017-09-16 |    675 |
|    104 | 2017-09-16 |     75 |
+--------+-----------+--------+
```