ASSIGNMENT NO : 4 (A)

Name : Ronak Sanjay Rahane
Roll No : 26
Batch : TE - B2

PROBLEM STATEMENT :

Unnamed PL/SQLcode block: Use of Control structure and Exception handling is After submitting the book, status will change from I to R.

• If the condition of fine is true, then details will be stored into fine table.
• Also handles the exception by named exception handler or user define exception handler.

mandatory.
Suggested Problem statement:
Consider Tables:

1. Borrower(Roll_no, Name, Date of Issue, Name of Book, Status)
2. Fine(Roll_no, Date, Amt)
• Accept Roll_no and Name of Book from user.
• Check the number of days (from date of issue).
• If days are between 15 to 30 then the fine amount will be Rs 5 per day.
• If no. of days>30, per day fine will be Rs 50 per day and for days less than 30, Rs. 5 per day.

Output :

mysql -h 192.168.2.232 -u TEB23 -p
Enter password:

Welcome to the MySQL monitor. Commands end with ; or \g.
Your MySQL connection id is 26
Server version: 5.6.41 MySQL Community Server (GPL)
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affiliates. Other names may be trademarks of their respective
owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> create database pr04;
Query OK, 1 row affected (0.00 sec)

```
mysql> use pr04;
Database changed
mysql> create table Fine(Roll_no int,sDate date,Amt int);
Query OK, 0 rows affected (0.30 sec)
mysql> create table Borrower(Roll_no int primary key,name varchar(20),DateofIssue date,book
varchar(20),status char);
Query OK, 0 rows affected (0.29 sec)

mysql> insert into Borrower values(1,'Rahul','2024-07-14','DBMS','I');
Query OK, 1 row affected (0.05 sec)

mysql> insert into Borrower values(2,'Ravi','2024-06-14','SPOS','I');
Query OK, 1 row affected (0.05 sec)

mysql> insert into Borrower values(3,'RAM','2024-07-25','CNS','I');
Query OK, 1 row affected (0.04 sec)

mysql> SELECT * FROM Borrower;
+---------+-------+-------------+------+--------+
| Roll_no | name  | DateofIssue | book | status |
+---------+-------+-------------+------+--------+
|       1 | Rahul | 2024-07-14  | DBMS | I      |
|       2 | Ravi  | 2024-06-14  | SPOS | I      |
|       3 | RAM   | 2024-07-25  | CNS  | I      |
+---------+-------+-------------+------+--------+
3 rows in set (0.00 sec)

mysql> SELECT * FROM Fine;
Empty set (0.01 sec)
mysql> drop procedure if exists p_fine;
Query OK, 0 rows affected, 1 warning (0.00 sec)

mysql>
mysql>     delimiter //
mysql>
mysql>     create procedure p_fine(IN rno int,IN  bname varchar(20))
    ->    begin
    ->
    ->       declare d1 date;
    ->       declare daycnt int;
    ->       declare fine_amt int;
    ->
    ->
    ->       SELECT DateofIssue into d1 FROM Borrower
```

```
    ->      WHERE Roll_no = rno and book= bname;
    ->
    ->      select DATEDIFF(now(),d1) into daycnt;
    ->        if(daycnt >= 15 and daycnt <= 30) then
    ->
    ->            set fine_amt := daycnt * 5;
    ->
    ->              insert into Fine(Roll_no,sDate,Amt) values (rno,now(),fine_amt);
    ->
    ->              update Borrower set status = 'R' where Roll_no = rno;
    ->
    ->      ELSEIF(daycnt > 30) then
    ->
    ->            set fine_amt := daycnt * 50;
    ->
    ->              insert into Fine(Roll_no,sDate,Amt) values (rno,now(),fine_amt);
    ->
    ->              update Borrower set status = 'R' where Roll_no = rno;
    ->
    ->        else
    ->
    ->                 update Borrower set status = 'R' where Roll_no = rno;
    ->
    ->        end if;
    ->
    ->     end;
    -> //

Query OK, 0 rows affected (0.00 sec)
mysql>
mysql> delimiter ;
mysql> call p_fine(1,'DBMS');
Query OK, 1 row affected (0.10 sec)

mysql> select * from  Fine;
+---------+------------+------+
| Roll_no | sDate      | Amt  |
+---------+------------+------+
|       1 | 2024-07-30 |   80 |
+---------+------------+------+
1 row in set (0.00 sec)

mysql> select * from  Borrower;
+---------+-------+-------------+------+--------+
```

```
| Roll_no | name  | DateofIssue | book | status |
+---------+-------+-------------+------+--------+
|       1 | Rahul | 2024-07-14  | DBMS | R      |
|       2 | Ravi  | 2024-06-14  | SPOS | I      |
|       3 | RAM   | 2024-07-25  | CNS  | I      |
+---------+-------+-------------+------+--------+
3 rows in set (0.00 sec)
mysql> call p_fine(2,'SPOS');
Query OK, 1 row affected (0.12 sec)

mysql> select * from  Borrower;
+---------+-------+-------------+------+--------+
| Roll_no | name  | DateofIssue | book | status |
+---------+-------+-------------+------+--------+
|       1 | Rahul | 2024-07-14  | DBMS | R      |
|       2 | Ravi  | 2024-06-14  | SPOS | R      |
|       3 | RAM   | 2024-07-25  | CNS  | I      |
+---------+-------+-------------+------+--------+
3 rows in set (0.00 sec)

mysql> select * from  Fine;
+---------+------------+------+
| Roll_no | sDate      | Amt  |
+---------+------------+------+
|       1 | 2024-07-30 |   80 |
|       2 | 2024-07-30 | 2300 |
+---------+------------+------+
2 rows in set (0.00 sec)

mysql> call p_fine(3,'CNS');
Query OK, 1 row affected (0.05 sec)
mysql> select * from  Borrower;
+---------+-------+-------------+------+--------+
| Roll_no | name  | DateofIssue | book | status |
+---------+-------+-------------+------+--------+
|       1 | Rahul | 2024-07-14  | DBMS | R      |
|       2 | Ravi  | 2024-06-14  | SPOS | R      |
|       3 | RAM   | 2024-07-25  | CNS  | R      |
+---------+-------+-------------+------+--------+
3 rows in set (0.00 sec)
mysql> select * from  Fine;
+---------+------------+------+
| Roll_no | sDate      | Amt  |
+---------+------------+------+
|       1 | 2024-07-30 |   80 |
|       2 | 2024-07-30 | 2300 |
+---------+------------+------+
2 rows in set (0.00 sec)
mysql>
```