Assignment 4

Consider Tables:

- 1. Borrower(Roll no, Name, DateofIssue, NameofBook, Status)
- 2. Fine(Roll_no,Date,Amt)
 - Accept Roll_no and NameofBook 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 and 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.
 - Also handles the exception by named exception handler or user define exception handler.

```
mysql> CREATE DATABASE Pratik;
Query OK, 1 row affected (0.03 sec)
mysql> USE Pratik;
Database changed
mysql> CREATE TABLE Borrower(roll_no int,name varchar(20),DOI
date,book_name varchar(20),status varchar(20));
Query OK, 0 rows affected (0.07 sec)
mysgl> INSERT INTO Borrower VALUES(1, 'Pratik', 2024-07-
01, 'DBMS', 'issued');
ERROR 1292 (22007): Incorrect date value: '2016' for column 'DOI' at row
mysql> INSERT INTO Borrower VALUES(1, 'Pratik', '2024-07-
01', 'DBMS', 'issued');
Query OK, 1 row affected (0.01 sec)
mysql> INSERT INTO Borrower VALUES(2, 'Ashok', '2024-06-
01','00P','issued');
Query OK, 1 row affected (0.01 sec)
mysql> INSERT INTO Borrower VALUES(3, 'Onkar', '2024-05-
01','TOC','returned');
Query OK, 1 row affected (0.01 sec)
mysql> INSERT INTO Borrower VALUES(4, 'Suraj', '2024-06-
15', 'CNS', 'returned');
Query OK, 1 row affected (0.01 sec)
mysql> INSERT INTO Borrower VALUES(5, 'Sarthak', '2024-05-
15', 'SPM', 'issued');
Query OK, 1 row affected (0.01 sec)
mysql> SELECT * FROM Borrower;
+----+
| roll no | name | DOI | book name | status |
+----
   1 | Pratik | 2024-07-01 | DBMS | issued | 2 | Ashok | 2024-06-01 | OOP | issued | 3 | Onkar | 2024-05-01 | TOC | returned | 4 | Suraj | 2024-06-15 | CNS | returned | 5 | Sarthak | 2024-05-15 | SPM | issued |
+----+
5 rows in set (0.00 sec)
```

mysql> CREATE TABLE Fine (roll no int, fine date date, amount varchar(20));

```
Query OK, 0 rows affected (0.04 sec)
mysql> SHOW TABLES;
+----+
| Tables_in_pratik |
+----+
| borrower
| fine
+----+
2 rows in set (0.02 sec)
mysql> delimiter //
mysql> create procedure fine_c(IN rno int(3),bname varchar(20))
   -> begin
   -> declare i date date;
   -> declare diff int;
   -> declare fine_amt int;
   -> declare exit handler for sqlexception select 'Table not Found';
   -> select DOI into i date from borrower where roll no=rno and
book name=
bname;
   -> select datediff(curdate(),i date) into diff;
   \rightarrow if(diff>15 and diff<=30) then
   -> set fine amt = diff*5;
   -> insert into fine values(rno, curdate(), fine amt);
   -> elseif(diff>30) then
   -> set fine amt = 15*5 + (diff-30)*50;
   -> insert into fine values(rno, curdate(), fine amt);
   -> end if;
   -> update borrower set status='returned' where rollno=rno and
book name=bname;
   -> end;
   -> //
Query OK, 0 rows affected, 1 warning (0.01 sec)
mysql> call fine c(1,'DBMS');//
1 row in set (0.01 sec)
mysql> select * from fine;
+----+
| roll no | fine date | amount |
+----+
1 | 2024-08-01 | 125
+----+
1 rows in set (0.00 sec)
```