ASSIGNMENT NO-4

Unnamed PL/SQLcode block: Use of Control structure and Exception handling is 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. 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 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.

```
gescoe@gescoe-OptiPlex-3010:~$ mysql -h 192.168.2.232 -u TEB39 -p
Enter password:
Welcome to the MariaDB monitor.  Commands end with ; or \g.
Your MySQL connection id is 29
Server version: 5.6.41 MySQL Community Server (GPL)

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

MySQL [(none)]> create database omkar;
Query OK, 1 row affected (0.001 sec)

MySQL [(none)]> use omkar;
Database changed
MySQL [omkar]> create table Fine(Roll_no int,sDate date,Amt int);
Query OK, 0 rows affected (0.310 sec)

MySQL [omkar]> create table Borrower(Roll_no int,name varchar(20),DateofIssue date,bname
varchar(20),status char);
Query OK, 0 rows affected (0.279 sec)

MySQL [omkar]> desc Borrower;
+-------------+-------------+------+-----+---------+-------+
| Field       | Type        | Null | Key | Default | Extra |
+-------------+-------------+------+-----+---------+-------+
| Roll_no     | int(11)     | YES  |     | NULL    |       |
| name        | varchar(20) | YES  |     | NULL    |       |
| DateofIssue | date        | YES  |     | NULL    |       |
| bname       | varchar(20) | YES  |     | NULL    |       |
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| status        | char(1)      | YES |       | NULL      |       |
+-------------+------------+------+-----+---------+-------+
5 rows in set (0.001 sec)

MySQL [omkar]> insert into Borrower values(41,omkar,'2024-07-
18','aptitude','I'),(61,'Punam','2024-07-3','gate','I'),(59,'harshali','2024-06-15','reasoning','I');
Query OK, 3 rows affected (0.043 sec)
Records: 3  Duplicates: 0  Warnings: 0

MySQL [omkar]> select * from Borrower;
+---------+----------+-------------+-----------+--------+
| Roll_no | name     | DateofIssue | bname     | status |
+---------+----------+-------------+-----------+--------+
|      41 | Omkar    | 2024-07-18  | aptitude  | I      |
|      61 | Punam    | 2024-07-03  | gate      | I      |
|      59 | harshali | 2024-06-15  | reasoning | I      |
+---------+----------+-------------+-----------+--------+
3 rows in set (0.001 sec)

MySQL [omkar]> drop procedure if exists p_fine;
Query OK, 0 rows affected, 1 warning (0.000 sec)

MySQL [omkar]>
MySQL [omkar]>      delimiter //
MySQL [omkar]>
MySQL [omkar]>      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
    ->
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    ->              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 (0.037 sec)

MySQL [omkar]>
MySQL [omkar]> delimiter ;

MySQL [omkar]> alter table Borrower change  bname book varchar(20);
Query OK, 0 rows affected (0.079 sec)
Records: 0  Duplicates: 0  Warnings: 0

MySQL [omkar]> DESC Borrower;
+-------------+-------------+------+-----+---------+-------+
| Field       | Type        | Null | Key | Default | Extra |
+-------------+-------------+------+-----+---------+-------+
| Roll_no     | int(11)     | YES  |     | NULL    |       |
| name        | varchar(20) | YES  |     | NULL    |       |
| DateofIssue | date        | YES  |     | NULL    |       |
| book        | varchar(20) | YES  |     | NULL    |       |
| status      | char(1)     | YES  |     | NULL    |       |
```

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+------------+------------+------+-----+---------+-------+
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5 rows in set (0.001 sec)

MySQL [omkar]> call p_fine(61,'gate');
Query OK, 1 row affected (0.082 sec)

MySQL [omkar]> call p_fine(41,'aptitude');
Query OK, 1 row affected (0.058 sec)

MySQL [omkar]> call p_fine(59,'reasoning');
Query OK, 1 row affected (0.147 sec)

MySQL [omkar]> select * from Borrower;

Roll_no	name	DateofIssue	book	status
41	Omkar	2024-07-18	aptitude	R
61	Punam	2024-07-03	gate	R
59	harshali	2024-06-15	reasoning	R

3 rows in set (0.001 sec)

MySQL [omkar]> select * from Fine;

Roll_no	sDate	Amt
61	2024-07-24	105
59	2024-07-24	1950

2 rows in set (0.001 sec)

MySQL [omkar]>