

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

Enter password: \*\*\*\*\*

Welcome to the MySQL monitor. Commands end with ; or \g.

Your MySQL connection id is 31

Server version: 8.0.30 MySQL Community Server - GPL

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

```
mysql> use abhi;
```

Database changed

```
mysql> delimiter //
```

```
mysql> call B1(1,'TOC')//
```

ERROR 1305 (42000): PROCEDURE abhi.B1 does not exist

```
mysql> delimiter ;
```

```
mysql> create table Borrower(roll_no int, name varchar(20),DOI date,book_name varchar(20),status varchar(20));
```

Query OK, 0 rows affected (0.28 sec)

mysql> insert into Borrower

-> values(12,'patel','2018-07-01','xyz','issued');

Query OK, 1 row affected (0.08 sec)

mysql> insert into Borrower

-> values(14,'shinde','2018-06-01','oop','issued');

Query OK, 1 row affected (0.08 sec)

mysql> insert into Borrower

-> values(16,'bhanghale','2018-05-01','coa','returned');

Query OK, 1 row affected (0.27 sec)

mysql> insert into Borrower

-> values(18,'shahane','2018-06-15','toc','returned');

Query OK, 1 row affected (0.14 sec)

mysql> insert into Borrower

-> values(20,'patil','2018-05-15','mp','issued');

Query OK, 1 row affected (0.13 sec)

mysql> select\*from Borrower;

roll_no	name	DOI	book_name	status
12	patel	2018-07-01	xyz	issued
14	shinde	2018-06-01	oop	issued
16	bhanghale	2018-05-01	coa	returned
18	shahane	2018-06-15	toc	returned
20	patil	2018-05-15	mp	issued

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

5 rows in set (0.00 sec)

mysql> show tables;

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

```
| Tables_in_abhi |
```

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

```
| borrower      |
```

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

1 row in set (0.24 sec)

mysql> create table Fine(roll\_no int,fine\_date date,amount int);

Query OK, 0 rows affected (0.63 sec)

mysql> insert into Fine

-> values(12,'2018-07-28',135);

Query OK, 1 row affected (0.08 sec)

mysql> insert into Fine

-> values(20,'2018-07-28',3700);

Query OK, 1 row affected (0.11 sec)

mysql> select\*from Fine;

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

```
| roll_no | fine_date | amount |
```

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

```
|    12 | 2018-07-28 |   135 |
```

```
|    20 | 2018-07-28 |  3700 |
```

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

2 rows in set (0.00 sec)

```

mysql> delimiter //
mysql> create procedure B(roll_new int,book_name varchar(20))
    -> begin
    -> declare X integer;
    -> declare continue handler for not found
    -> begin
    -> select 'NOT FOUND';
    -> end;
    -> select datediff(curdate(),DOI)into X from Borrower where roll_no=roll_new;
    -> if(X>15&&X<30)
    -> then
    -> insert into Fine values(roll_new,curdate(),(X*5));
    -> end if;
    -> if(X>30)
    -> then
    -> insert into Fine values(roll_new,curdate(),(X*50));
    -> end if;
    -> update Borrower set status='returned' where roll_no=roll_new;
    -> end;
    -> //

```

Query OK, 0 rows affected, 1 warning (0.14 sec)

```
mysql> call B(12,'xyz')//
```

Query OK, 1 row affected (0.19 sec)

```
mysql> select*from Fine//
```

roll_no	fine_date	amount
12	2018-07-28	135
20	2018-07-28	3700

```
| 12 | 2022-09-14 | 76800 |
```

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

3 rows in set (0.00 sec)

```
mysql> select*from Fine;//
```

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

```
| roll_no | fine_date | amount |
```

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

```
| 12 | 2018-07-28 | 135 |
```

```
| 20 | 2018-07-28 | 3700 |
```

```
| 12 | 2022-09-14 | 76800 |
```

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

3 rows in set (0.00 sec)

```
mysql> select*from Borrower;//
```

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

```
| roll_no | name | DOI | book_name | status |
```

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

```
| 12 | patel | 2018-07-01 | xyz | returned |
```

```
| 14 | shinde | 2018-06-01 | oop | issued |
```

```
| 16 | bhanghale | 2018-05-01 | coa | returned |
```

```
| 18 | shahane | 2018-06-15 | toc | returned |
```

```
| 20 | patil | 2018-05-15 | mp | issued |
```

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

5 rows in set (0.00 sec)

```
mysql> call B(20,'patil');
```

```
-> //
```

Query OK, 1 row affected (0.15 sec)

```
mysql> select*from Fine;//
```

```

+-----+-----+-----+
| roll_no | fine_date | amount |
+-----+-----+-----+
| 12 | 2018-07-28 | 135 |
| 20 | 2018-07-28 | 3700 |
| 12 | 2022-09-14 | 76800 |
| 20 | 2022-09-14 | 79150 |
+-----+-----+-----+

```

4 rows in set (0.00 sec)

```
mysql> select*from Borrower;//
```

```

+-----+-----+-----+-----+-----+
| roll_no | name    | DOI    | book_name | status |
+-----+-----+-----+-----+-----+
| 12 | patel   | 2018-07-01 | xyz      | returned |
| 14 | shinde  | 2018-06-01 | oop      | issued   |
| 16 | bhanghale | 2018-05-01 | coa      | returned |
| 18 | shahane  | 2018-06-15 | toc      | returned |
| 20 | patil    | 2018-05-15 | mp       | returned |
+-----+-----+-----+-----+-----+

```

5 rows in set (0.00 sec)

```
mysql>
```

```
mysql> insert into Borrower
  -> values(12,'patel','2018-07-01','xyz','issued');
Query OK, 1 row affected (0.08 sec)

mysql> insert into Borrower
  -> values(14,'shinde','2018-06-01','oop','issued');
Query OK, 1 row affected (0.08 sec)

mysql> insert into Borrower
  -> values(16,'bhanghale','2018-05-01','coa','returned');
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  -> values(18,'shahane','2018-06-15','toc','returned');
Query OK, 1 row affected (0.14 sec)

mysql> insert into Borrower
  -> values(20,'patil','2018-05-15','mp','issued');
Query OK, 1 row affected (0.13 sec)
```

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

roll_no	name	DOI	book_name	status
12	patel	2018-07-01	xyz	issued
14	shinde	2018-06-01	oop	issued
16	bhanghale	2018-05-01	coa	returned
18	shahane	2018-06-15	toc	returned
20	patil	2018-05-15	mp	issued

```
5 rows in set (0.00 sec)
```

```
mysql> show tables;
```

Tables_in_abhi
borrower

```
1 row in set (0.24 sec)
```

```
mysql> create table Fine(roll_no int,fine_date date,amount int);
Query OK, 0 rows affected (0.63 sec)
```

```
Query OK, 0 rows affected (0.63 sec)
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```
mysql> insert into Fine
  -> values(12,'2018-07-28',135);
Query OK, 1 row affected (0.08 sec)
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```
mysql> insert into Fine
  -> values(20,'2018-07-28',3700);
Query OK, 1 row affected (0.11 sec)
```

```
mysql> select*from Fine;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that co
ne' at line 1
```

```
mysql> select*from Fine;
```

roll_no	fine_date	amount
12	2018-07-28	135
20	2018-07-28	3700

```
2 rows in set (0.00 sec)
```

```
mysql> delimiter //
```

```
mysql> create procedure B(roll_new int,book_name varchar(20))
```

```
  -> begin
  -> declare X integer;
  -> declare continue handler for not found
  -> begin
  -> select 'NOT FOUND';
  -> end;
  -> select datediff(curdate(),DOI)into X from Borrower where roll_no=roll_new;
  -> if(X>15&&X<30)
  -> then
  -> insert into Fine values(roll_new,curdate() ,(X*5));
  -> end if;
  -> if(X>30)
  -> then
  -> insert into Fine values(roll_new,curdate() ,(X*50));
  -> end if;
  -> update Borrower set status='returned' where roll_no=roll_new;
  -> end;
  -> //
```

```
Query OK, 0 rows affected, 1 warning (0.14 sec)
```

```

MySQL 8.0 Command Line Client
Query OK, 0 rows affected (0.63 sec)

mysql> insert into Fine
-> values(12,'2018-07-28',135);
Query OK, 1 row affected (0.08 sec)

mysql> insert into Fine
-> values(20,'2018-07-28',3700);
Query OK, 1 row affected (0.11 sec)

mysql> select*from Fine;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that co
ne' at line 1
mysql> select*from Fine;
+-----+-----+-----+
| roll_no | fine_date | amount |
+-----+-----+-----+
| 12 | 2018-07-28 | 135 |
| 20 | 2018-07-28 | 3700 |
+-----+-----+-----+
2 rows in set (0.00 sec)

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mysql> create procedure B(roll_new int,book_name varchar(20))
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-> then
-> insert into Fine values(roll_new,curdate() ,(X*5));
-> end if;
-> if(X>30)
-> then
-> insert into Fine values(roll_new,curdate() ,(X*50));
-> end if;
-> update Borrower set status='returned' where roll_no=roll_new;
-> end;
-> //
Query OK, 0 rows affected, 1 warning (0.14 sec)

```

```

MySQL 8.0 Command Line Client
+-----+-----+-----+-----+-----+
| 20 | patil | 2018-05-15 | mp | issued |
+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> call B(20,'patil');
-> //
Query OK, 1 row affected (0.15 sec)

mysql> select*from Fine;//
+-----+-----+-----+
| roll_no | fine_date | amount |
+-----+-----+-----+
| 12 | 2018-07-28 | 135 |
| 20 | 2018-07-28 | 3700 |
| 12 | 2022-09-14 | 76800 |
| 20 | 2022-09-14 | 79150 |
+-----+-----+-----+
4 rows in set (0.00 sec)

mysql> select*from Borrower;//
+-----+-----+-----+-----+-----+
| roll_no | name | DOI | book_name | status |
+-----+-----+-----+-----+-----+
| 12 | patel | 2018-07-01 | xyz | returned |
| 14 | shinde | 2018-06-01 | oop | issued |
| 16 | bhanghale | 2018-05-01 | coa | returned |
| 18 | shahane | 2018-06-15 | toc | returned |
| 20 | patil | 2018-05-15 | mp | returned |
+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql>

```