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Batch:L3

Q>>Write a procedure to calculate AREA between 5 and 9 and use proper exception

```
MariaDB [practical]> delimiter @
MariaDB [practical]> create procedure area(in rad int)
    -> begin
    -> declare speciality condition for sqlstate '45000' ;
    -> if rad>9 or rad<5 then signal sqlstate '45000'
    -> set message_text='Enter Valid Value';
    -> else
    -> insert into area values(rad,(3.14*rad*rad));
    -> end if;
    -> end;@
Query OK, 0 rows affected (0.013 sec)

MariaDB [practical]> call area(5)@
Query OK, 1 row affected (0.005 sec)

MariaDB [practical]> select * from area;
    -> @
+--------+------+
| radius | area |
+--------+------+
|      5 |   79 |
+--------+------+
1 row in set (0.001 sec)

MariaDB [practical]> call area(0)@
ERROR 1644 (45000): Enter Valid Value
MariaDB [practical]> call area(9)@
Query OK, 1 row affected (0.003 sec)

MariaDB [practical]> call area(10)@
ERROR 1644 (45000): Enter Valid Value
MariaDB [practical]> select * from area;
    -> @
+--------+------+
| radius | area |
+--------+------+
|      5 |   79 |
|      9 |  254 |
+--------+------+
2 rows in set (0.001 sec)
```

Q>>Unnamed PL/SQL code block: Use of Control

structure and Exception handling is mandatory.Write a PL/SQL b
lock of code for the following requirements:-
Schema:
1. Borrower(Roll,Name,Date of Issue,Name of Book,Status)
2. Fine(Roll,Date,Amt)
Accept Roll & 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 Rs5 per day.
If no.of days>30,per day fine will be Rs 50per 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.

```
MariaDB [practical]> create procedure FineCalculations(in rno int(3),in bname varchar(20))
    -> begin
    -> declare v1 date;
    -> declare v2 int;
    -> declare speciality condition for sqlstate '45000' ;
    -> select date_of_issue into v1 from Borrower where roll_no =rno;
    -> set v2:=datediff(curdate(),v1);
    -> if v2<=1 then
    -> signal sqlstate '45000' set message_text='Enter Valid Value';
    -> end if;
    -> if v2>= 15 and v2<=30  then
    -> insert into Fine values(rno,curdate(),(v2-15)*5);
    -> elseif v2>30 then
    -> insert into Fine values(rno,curdate(),(v2-30)*50);
    -> else
    ->  insert into Fine values(rno,curdate(),0);
    -> end if;
    -> update Borrower set status="R" where roll_no=rno;
    -> select concat("Task Completed");
    -> end;
    ->
    ->
    -> @
Query OK, 0 rows affected (0.073 sec)

MariaDB [practical]> call FineCalculations(5,"CPP")@
+--------------------------+
| concat("Task Completed") |
+--------------------------+
| Task Completed           |
+--------------------------+
1 row in set (0.006 sec)

Query OK, 3 rows affected (0.006 sec)

MariaDB [practical]> call FineCalculations(7,"DBMS")@
+--------------------------+
| concat("Task Completed") |
```

```
+--------------------------+
| Task Completed           |
+--------------------------+
1 row in set (0.012 sec)

Query OK, 3 rows affected (0.012 sec)


MariaDB [practical]> call FineCalculations(8,"DBMS")@
+--------------------------+
| concat("Task Completed") |
+--------------------------+
| Task Completed           |
+--------------------------+
1 row in set (0.008 sec)

Query OK, 3 rows affected (0.008 sec)

MariaDB [practical]> select * From Fine
    -> @
+---------+------------+------+
| roll_no | returndate | amt  |
+---------+------------+------+
|       5 | 2022-09-05 | 1400 |
|       7 | 2022-09-05 | 1400 |
|       8 | 2022-09-05 |  750 |
+---------+------------+------+
3 rows in set (0.001 sec)
```