Q. Unnamed PL/SQL code block: Use of Control structure and Exception handling is mandatory. Write a PL/SQL block of code for the following requirements:- Schema:

1. Borrower(Roll\_no, Name, DateofIssue, NameofBook, Status)

2. Fine(Roll\_no, Date, Amt)

Accept roll\_no & name of book from user

Check the number of days (from date of issue); if days are between 15 to 30 then fine amounts will be Rs 5per day

If no. of days>30, per day fine will be Rs 50 per 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

Frame the problem statement for writing PL/SQL block inline with above statement.

MariaDB [3311\_Ass5]> create table borrower(roll\_no int, name varchar(15), date\_of\_issue date, name\_of\_book varchar(10), status varchar(10));

Query OK, 0 rows affected (0.06 sec)

MariaDB [3311\_Ass5]> create table fine(roll\_no int, amt int);

Query OK, 0 rows affected (0.05 sec)

MariaDB [3311\_Ass5]> delimiter //

MariaDB [3311\_Ass5]> create procedure input(in r\_no int, in name varchar(10), in doi date, in nob varchar(10), in st varchar(10))

-> insert into borrower values(r\_no, name, doi, nob, st);

-> //

Query OK, 0 rows affected

MariaDB [3311\_Ass5]> call input(1, "akash", "2015-02-11", "DBMS", "issued")//

Query OK, 1 row affected (0.07 sec)

MariaDB [3311\_Ass5]> call input(2, "anand", "2015-03-11", "CN", "issued")//

Query OK, 1 row affected (0.02 sec)

MariaDB [3311\_Ass5]> call input(3, "abhinav", "2015-11-01", "MATHS", "issued")//

Query OK, 1 row affected (0.02 sec)

3 rows in set (0.00 sec)

MariaDB [3311\_Ass5]> call input(4, "ashok", "2019-07-07", "TOC", "issued")//

Query OK, 1 row affected (0.01 sec)

MariaDB [3311\_Ass5]> call input(5, "ram", "2019-07-01", "SEPM", "issued")//

Query OK, 1 row affected (0.01 sec)

MariaDB [3311\_Ass5]> select \* from borrower;

-> //

+---------+---------+---------------+--------------+----------+

| roll\_no | name | date\_of\_issue | name\_of\_book | status |

+---------+---------+---------------+--------------+----------+

| 1 | akash | 2015-02-11 | DBMS | issued |

| 2 | anand | 2015-03-11 | CN | issued |

| 3 | abhinav | 2015-11-01 | MATHS | issued |

| 4 | ashok | 2019-07-07 | TOC | issued |

| 5 | ram | 2019-07-01 | SEPM | issued |

+---------+---------+---------------+--------------+----------+

5 rows in set (0.00 sec)

MariaDB [3311\_Ass5]> create procedure cal\_fine(in rn int, in bn varchar(10))

begin

declare bdate date;

declare amt, days int;

declare cur cursor for select date\_of\_issue from borrower where (roll\_no = rn and name\_of\_book = bn);

declare exit handler for not found

select "ID not found" as "Error Message";

set amt = 0;

open cur;

fetch cur into bdate;

close cur;

set days = to\_days(now()) - to\_days(bdate);

if days > 30 then

set amt = 75 + (days - 30)\*50;

elseif days > 15 then

set amt = (days - 15)\*5;

end if;

if amt > 0 then

insert into fine values(rn, amt, bdate);

end if;

update borrower set status = "returned" where roll\_no = rn;

end

//

Query OK, 0 rows affected (0.00 sec)

MariaDB [3311\_Ass5]> call cal\_fine(4, "TOC")//

Query OK, 1 row affected (0.04 sec)

MariaDB [3311\_Ass5]> select \* from fine//

+---------+------+------------+

| roll\_no | amt | date\_r |

+---------+------+------------+

| 4 | 35 | 2019-07-07 |

+---------+------+------------+

1 row in set (0.00 sec)

create procedure mul2(in number int)

begin

declare cub int;

declare squ int;

declare s int;

declare c int;

declare cur cursor for select number from val;

declare exit handler for not found

select "id not found " as "error message";

set s=0;

set c=0;

open cur;

fetch cur into cub;

close cur;

set c=cub\*cub\*cub;

open cur;

fetch cur into squ;

close cur;

set s= squ\*squ;

insert into val values(number,s,c);

end

//