ASSIGNMENT-2

- ***Objective:-*** Use of control structure using PL/SQL code block.
- ***Problem Statement:-*** Write a PL/SQL block of code for the following requirements:-
  ### Schema:
  1. Borrower(Rollin, 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 amount will be Rs 5 per 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
- ***Author*:-** Dewanshi Lokesh Gupta
- ***Roll no:-*** 60
- ***PRN:-*** UCS1F1060

1.*Created database and it's tables:-*

2.Created a trigger on table fine:-

```
DELIMITER $$
create trigger Ins_student
Before insert
on borrower
for each row
begin
insert into fine(Rno,Bname,status) values(new.Rno,new.Bname,'I');
end $$
DELIMITER  ;
```

3.Insert values into borrower:-

4.Create a procedure to calculate the fine:-

Delimiter $$
Create procedure book_fine(IN r int,IN b varchar(50),IN d Date)
Begin
Declare s int;
Declare x date;
Update borrower set DateofReturn=d where Rno=r;
Select DateofIssue into x from borrower where Rno=r;
Set s=DATEDIFF(d,x);
if(s>=15 OR s<=30) then
update fine set amt=5*s where Rno=r and Bname=b;
elseif(s>30) then
update fine set amt=50*s where Rno=r and Bname=b;
else
update fine set amt=100*s where Rno=r and Bname=b;
End if ;
update fine set status= 'R' where Rno=r and Bname=b;
End $$
Delimiter ;

```
Command Prompt - mysql  -u root -p
mysql> Delimiter ;
mysql> call book_fine(102,'XYZ','2022-04-30');
Query OK, 1 row affected (0.15 sec)

mysql> call book_fine(103,'RAJ','2022-05-30');
Query OK, 1 row affected (0.15 sec)

mysql> call book_fine(104,'RAM','2022-05-28');
Query OK, 1 row affected (0.07 sec)

mysql> call book_fine(105,'DEW','2022-06-30');
Query OK, 1 row affected (0.54 sec)

mysql> SELECT *from borrower;
+------+-------+-------------+--------------+
| Rno  | BName | DateofIssue | DateofReturn |
+------+-------+-------------+--------------+
|  101 | ABC   | 2022-04-10  | 2022-04-15   |
|  102 | XYZ   | 2022-04-20  | 2022-04-30   |
|  103 | RAJ   | 2022-05-05  | 2022-05-30   |
|  104 | RAM   | 2022-05-15  | 2022-05-28   |
|  105 | DEW   | 2022-05-31  | 2022-06-30   |
+------+-------+-------------+--------------+
5 rows in set (0.00 sec)

mysql> SELECT *from fine;
+------+-------+------+--------+
| Rno  | BName | amt  | status |
+------+-------+------+--------+
|  101 | ABC   |   25 | R      |
|  102 | XYZ   |   50 | R      |
|  103 | RAJ   |  125 | R      |
|  104 | RAM   |   65 | R      |
|  105 | DEW   |  150 | R      |
+------+-------+------+--------+
5 rows in set (0.00 sec)

mysql>
```