**Assignment 4**

**Name:** Kotwar Shraddha Rajkumar

**Roll no :** 18

**Batch :** T1

**Assignment : -** 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, Date\_of\_Issue, 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 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.

mysql> use dbms;

Database changed

mysql> create table Borrower(Roll\_no int,Name varchar(20),Dateof\_issue date,NameofBook varchar(20),Status varchar(10));

Query OK, 0 rows affected (0.09 sec)

mysql> desc Borrower;

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

| Field | Type | Null | Key | Default | Extra |

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

| Roll\_no | int | YES | | NULL | |

| Name | varchar(20) | YES | | NULL | |

| Dateof\_issue | date | YES | | NULL | |

| NameofBook | varchar(20) | YES | | NULL | |

| Status | varchar(10) | YES | | NULL | |

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

5 rows in set (0.04 sec)

mysql> insert into Borrower values(1,"Kavita",'2023-09-20',"DBMS","I");

Query OK, 1 row affected (0.01 sec)

mysql> insert into Borrower values(2,"Anu",'2023-09-09',"DataSCience","I");

Query OK, 1 row affected (0.01 sec)

mysql> insert into Borrower values(3,"Shraddha",'2023-09-02',"CN","I");

Query OK, 1 row affected (0.01 sec)

mysql> select \* from Borrower;

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

| Roll\_no | Name | Dateof\_issue | NameofBook | Status |

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

| 1 | Kavita | 2023-09-20 | DBMS | I |

| 2 | Anu | 2023-09-09 | DataSCience | I |

| 3 | Shraddha | 2023-09-02 | CN | I |

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

3 rows in set (0.00 sec)

mysql> create table fine(Roll\_No int,fDate date,Amt int);

Query OK, 0 rows affected (0.03 sec)

mysql> desc fine;

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

| Field | Type | Null | Key | Default | Extra |

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

| Roll\_No | int | YES | | NULL | |

| fDate | date | YES | | NULL | |

| Amt | int | YES | | NULL | |

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

3 rows in set (0.00 sec)

mysql> Delimiter //

mysql> create procedure pr1(In rno1 int(3),name1 varchar(30))

-> begin

-> Declare i\_date date;

-> Declare diff int;

-> Declare Fine\_amt int;

-> select Dateof\_issue into i\_date from Borrower where Roll\_no=rno1 and NameofBook=name1;

-> Select DATEDIFF(CURDATE(),i\_date) into diff;

-> if( diff>=15 and diff<=30)then

-> set Fine\_amt=diff\*5;

-> insert into fine values(rno1,CURDATE(),Fine\_amt);

-> elseif(diff>30) then

-> set Fine\_amt=diff\*50;

-> insert into fine values(rno1,CURDATE(),Fine\_amt);

-> End if;

-> Update Borrower set Status="R" where Roll\_no=rno1 and NameofBook=name1;

-> End;

-> //

Query OK, 0 rows affected, 1 warning (0.01 sec)

mysql> delimiter ;

mysql> call pr1(1,"DBMS");

Query OK, 1 row affected (0.01 sec)

mysql> call pr1(2,"DataSCience");

Query OK, 1 row affected (0.01 sec)

mysql> call pr1(3,"CN");

Query OK, 1 row affected (0.01 sec)

***—--------------After calling the procedure—--------------------***

mysql> select \* from fine;

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

| Roll\_No | fDate | Amt |

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

| 2 | 2023-09-24 | 75 |

| 3 | 2023-09-24 | 110 |

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

2 rows in set (0.00 sec)

mysql> select \* from Borrower;

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

| Roll\_no | Name | Dateof\_issue | NameofBook | Status |

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

| 1 | Kavita | 2023-09-20 | DBMS | R |

| 2 | Anu | 2023-09-09 | DataSCience | R |

| 3 | Shraddha | 2023-09-02 | CN | R |

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

3 rows in set (0.00 sec)