**ASSIGNMENT NO:-5**

**----------------------------------------------------------------------**

**Problem Statement:-**Unnamed PL/SQL code block Use of control structure and exception handling in mandatory. Write a PL/SQL block of code for the following requirements schima :

1.Borrower ( rollno, name,dateofissue,nameofbook,status)

2.Fine ( rollno,date,amt)

a].Accept rollno & name of book from user.

b].Check the number of days (from dateofissue),if days are between 15 to 30 then fine amount will be Rs 5 per day.

c].If no of days>30 per day fine will be Rs 50 per day & for days less than 30,Rs 5 per day.

d].After submitting the book status will change from I to R.

e]. If condition of fine is true ,then details will be stored into fine table.

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mysql> CREATE DATABASE ASS5;

Query OK, 1 row affected (0.00 sec)

mysql> USE ASS5 ;

Database changed

mysql> CREATE TABLE BORROWER (ROLLNO INTEGER(10),NAME VARCHAR (30),DATEOFISSUE VARCHAR (15), NAMEOFBOOK VARCHAR (30), STATUS CHAR (5));

Query OK, 0 rows affected (0.36 sec)

mysql> INSERT INTO BORROWER (ROLLNO,NAME,DATEOFISSUE,NAMEOFBOOK,STATUS)

VALUES

(101,'RAM','2017-06-17','DBMS','R'),

(102,'SHAM','2017-07-20','ISEE','R'),

(103,'SITA','2017-07-15','SE','R'),

(106,'GITA','2017-08-27','DBMS','I'),

(107,'QQQ','2017-08-17','CN','I'),

(108,'SSSQQQ','2017-08-1','DBMS','I');

mysql> SELECT \* FROM BORROWER;

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

| ROLLNO | NAME | DATEOFISSUE | NAMEOFBOOK | STATUS |

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

| 101 | RAM | 2017-06-17 | DBMS | R |

| 102 | SHAM | 2017-07-20 | ISEE | R |

| 103 | SITA | 2017-07-15 | SE | R |

| 106 | GITA | 2017-08-27 | DBMS | I |

| 107 | QQQ | 2017-08-17 | CN | I |

| 108 | SSSQQQ | 2017-08-1 | DBMS | I |

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

6 rows in set (0.00 sec)

DELIMITER //

CREATE PROCEDURE DOISSUEBOOK(p1 int,p2 varchar(30),p3 varchar (15),p4 varchar(30))

X:BEGIN

SET @p3val = str\_to\_date(p3,'%d/%m/%y');

SET @p5val = 'i';

SET @ERRORMSG = '';

IF p1 <= 0 THEN

BEGIN

SET @ERRORMSG = 'Wrong Roll no Specified';

SELECT @ERRORMSG;

LEAVE X;

END;

END IF;

IF LENGTH(p4) <= 0 THEN

BEGIN

SET @ERRORMSG = 'WRONG BOOK';

SELECT @ERRORMSG;

LEAVE X;

END;

END IF;

INSERT INTO BORROWER (NAME,DATEOFISSUE,NAMEOFBOOK,STATUS,ROLLNO)

VALUES(p2,@p3val,p4,@p5val,p1);

END //

Query OK, 0 rows affected (1.80 sec)

CREATE PROCEDURE DORETURN(RNO integer(10),BOOKNAME VARCHAR(30))

BEGIN

SET @NUMDAYS = 0;

SET @FINEAMT = 0.0;

SET @NUMREC = 0;

SELECT DATEDIFF(CURDATE(),DATEOFISSUE) FROM BORROWER WHERE ROLLNO = RNO AND NAMEOFBOOK = BOOKNAME INTO @NUMDAYS;

SELECT COUNT(\*) FROM BORROWER WHERE ROLLNO = RNO AND NAMEOFBOOK = BOOKNAME INTO @NUMREC;

IF @NUMDAYS >= 15 AND @NUMDAYS <= 30 THEN SET @FINEAMT=(@NUMDAYS-15)\*5;

ELSEIF @NUMDAYS > 30 THEN SET @FINEAMT = ((15\*5)+(@NUMDAYS-30)\*50);

ELSE SET @FINEAMT = 0;

END IF;

IF @NUMREC > 0 THEN

UPDATE BORROWER SET STATUS = 'R' WHERE ROLLNO = RNO AND NAMEOFBOOK = BOOKNAME;

INSERT INTO FINE(ROLLNO,DATE,AMT) VALUES (RNO,CURDATE(),@FINEAMT);

END IF;

END;

//

mysql> CREATE TABLE FINE (ROLLNO INTEGER,DATE DATE,AMT DECIMAL (5,2)); //

Query OK, 0 rows affected (0.37 sec)

mysql> CALL DOISSUEBOOK(106,'GITA','2017-08-27',''); //

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

| @ERRORMSG |

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

| WRONG BOOK |

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

1 row in set (0.00 sec)

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

mysql> CALL DOISSUEBOOK(0,'GITA','2017-08-27','DBMS'); //

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

| @ERRORMSG |

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

| Wrong Roll no Specified |

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

1 row in set (0.00 sec)

mysql> CALL DORETURN(106,'DBMS'); //

Query OK, 1 row affected (0.08 sec)

mysql> SELECT \* FROM FINE; //

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

| ROLLNO | DATE | AMT |

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

| 106 | 2017-09-12 | 5.00 |

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

1 row in set (0.00 sec)

mysql> SELECT \* FROM BORROWER; //

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

| ROLLNO | NAME | DATEOFISSUE | NAMEOFBOOK | STATUS |

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

| 101 | RAM | 2017-06-17 | DBMS | R |

| 102 | SHAM | 2017-07-20 | ISEE | R |

| 103 | SITA | 2017-07-15 | SE | R |

| 106 | GITA | 2017-08-27 | DBMS | R |

| 107 | QQQ | 2017-08-17 | CN | I |

| 108 | SSSQQQ | 2017-08-1 | DBMS | I |

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

6 rows in set (0.00 sec)

mysql> CALL DORETURN(107,'CN'); //

Query OK, 1 row affected (0.38 sec)

mysql> SELECT \* FROM BORROWER; //

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

| ROLLNO | NAME | DATEOFISSUE | NAMEOFBOOK | STATUS |

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

| 101 | RAM | 2017-06-17 | DBMS | R |

| 102 | SHAM | 2017-07-20 | ISEE | R |

| 103 | SITA | 2017-07-15 | SE | R |

| 106 | GITA | 2017-08-27 | DBMS | R |

| 107 | QQQ | 2017-08-17 | CN | R |

| 108 | SSSQQQ | 2017-08-1 | DBMS | I |

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

6 rows in set (0.00 sec)

mysql> SELECT \* FROM FINE; //

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

| ROLLNO | DATE | AMT |

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

| 106 | 2017-09-12 | 5.00 |

| 107 | 2017-09-12 | 55.00 |

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

2 rows in set (0.00 sec)

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