**ASSIGNMENT No 4**

TCOA35 -Shrutee Pimpare

**TITLE:**

Unnamed PL/SQL code block: Use of Control structure and Exception handling is mandatory.

SOLUTION:

mysql> USE DB4; Database changed

mysql> CREATE TABLE BORROWER(

-> ROLL\_NO INT PRIMARY KEY,

-> NAME VARCHAR(20),

-> DATEOFISSUE DATE,

-> NAMEOFBOOK VARCHAR(20),

-> STATUS VARCHAR(20)

-> );

Query OK, 0 rows affected (0.15 sec)

mysql> CREATE TABLE FINE(

-> ROLL\_NO INT,

-> FOREIGN KEY(ROLL\_NO) REFERENCES BORROWER(ROLL\_NO),

-> RETURNDATE DATE,

-> AMOUNT INT

-> );

Query OK, 0 rows affected (0.01 sec)

mysql> INSERT INTO BORROWER VALUES(1,'Samiksha','2022-09-06','DBMS','I'); Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO BORROWER VALUES(2,'Komal','2022-08-06','SPOS','I'); Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO BORROWER VALUES(3,'Priyal','2022-09-15','CNS','I'); Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO BORROWER VALUES(4,'Pranita','2022-08-30','DS','I'); Query OK, 1 row affected (0.00 sec)

mysql> INSERT INTO BORROWER VALUES(5,'Madhura','2022-07-05','TOC','I'); Query OK, 1 row affected (0.00 sec)

mysql> SELECT \* FROM BORROWER;

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

| ROLL\_NO | NAME | DATEOFISSUE | NAMEOFBOOK | STATUS |

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

| 1 | Samiksha | 2022-09-06 | DBMS | I |

| 2 | Komal | 2022-08-06 | SPOS | I |

| 3 | Priyal | 2022-09-15 | CNS | I |

| 4 | Pranita | 2022-08-30 | DS | I |

| 5 | Madhura | 2022-07-05 | TOC | I |

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

5 rows in set (0.00 sec)

mysql> DELIMITER $

mysql> CREATE PROCEDURE PROC(IN ROLL INT, BOOKNAME VARCHAR(20))

-> BEGIN

-> DECLARE FINE1 INT;

-> DECLARE NOOFDAYS INT;

-> DECLARE ISSUEDATE DATE;

-> DECLARE EXIT HANDLER FOR SQLEXCEPTION SELECT 'TABLE NOT FOUND';

-> SELECT DATEOFISSUE INTO ISSUEDATE FROM BORROWER WHERE ROLL\_NO=ROLL;

-> SELECT DATEDIFF(CURDATE(),ISSUEDATE) INTO NOOFDAYS;

-> IF NOOFDAYS>15 AND NOOFDAYS<=30 THEN

-> SET FINE1=NOOFDAYS\*5;

-> INSERT INTO FINE VALUES(ROLL,CURDATE(),FINE1);

-> ELSEIF NOOFDAYS>30 THEN

-> SET FINE1=((NOOFDAYS-30)\*50) + 30\*5;

-> INSERT INTO FINE VALUES(ROLL,CURDATE(),FINE1);

-> ELSE

-> INSERT INTO FINE VALUES(ROLL,CURDATE(),0);

-> END IF;

-> UPDATE BORROWER SET STATUS='R' WHERE ROLL\_NO=ROLL AND NAMEOFBOOK=BOOKNAME;

-> END $

Query OK, 0 rows affected (0.10 sec)

mysql> DELIMITER ; mysql> CALL PROC(1, 'DBMS');

Query OK, 1 row affected (0.09 sec)

mysql> CALL PROC(2, 'SPOS');

Query OK, 1 row affected (0.00 sec)

mysql> CALL PROC(3, 'CNS');

Query OK, 1 row affected (0.00 sec) mysql> CALL PROC(4, 'DS'); Query OK, 1 row affected (0.00 sec) mysql> CALL PROC(5, 'TOC');

Query OK, 1 row affected (0.01 sec)

mysql> SELECT \* FROM FINE;

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| ROLL\_NO | RETURNDATE | AMOUNT |

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

| 1 | 2022-09-19 | 0 |

| 2 | 2022-09-19 | 850 |

| 3 | 2022-09-19 | 0 |

| 4 | 2022-09-19 | 100 |

| 5 | 2022-09-19 | 2450 |

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5 rows in set (0.00 sec)

mysql> SELECT \* FROM BORROWER;

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

| ROLL\_NO | NAME | DATEOFISSUE | NAMEOFBOOK | STATUS |

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

| 1 | Samiksha | 2022-09-06 | DBMS | R |

| 2 | Komal | 2022-08-06 | SPOS | R |

| 3 | Priyal | 2022-09-15 | CNS | R |

| 4 | Pranita | 2022-08-30 | DS | R |

| 5 | Madhura | 2022-07-05 | TOC | R |

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5 rows in set (0.00 sec)