**DBMS Lab**

**Assignment No. 5 (Stored Procedures and Functions)**

**Title**:- Write a Stored Procedure for the categorization of student.

If marks scored by students in examination is <=1500 and marks>=990 then student will be placed in distinction category

If marks scored are between 989 and 900 category is first class

If marks 899 and 825 category is Higher Second Class

Write a PL/SQL block to use procedure created with above requirement.

Stud\_Marks(name, total\_marks)

Result(Roll,Name, Class)

**Commands and Screenshots**:-

Table: Student\_Marks

mysql> CREATE TABLE Student\_Marks (

-> Roll\_No int NOT NULL PRIMARY KEY,

-> Name varchar(25),

-> Total\_Marks int );

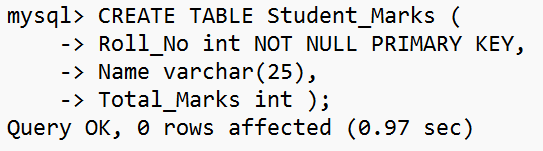


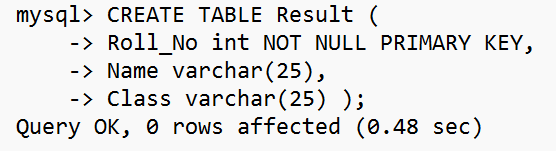
Table: Result

mysql> CREATE TABLE Result (

-> Roll\_No int NOT NULL PRIMARY KEY,

-> Name varchar(25),

-> Class varchar(25) );



Procedure: Grade\_Allotment

mysql> DELIMITER :

mysql> CREATE PROCEDURE Grade\_Allotment (IN Roll int, Name varchar(25), Marks int)

-> BEGIN

-> IF marks BETWEEN 990 AND 1500 THEN

-> INSERT INTO result VALUES (name, 'Distinction');

-> ELSEIF marks BETWEEN 900 AND 989 THEN

-> INSERT INTO result VALUES (name, 'First Class');

-> ELSEIF marks BETWEEN 825 AND 899 THEN

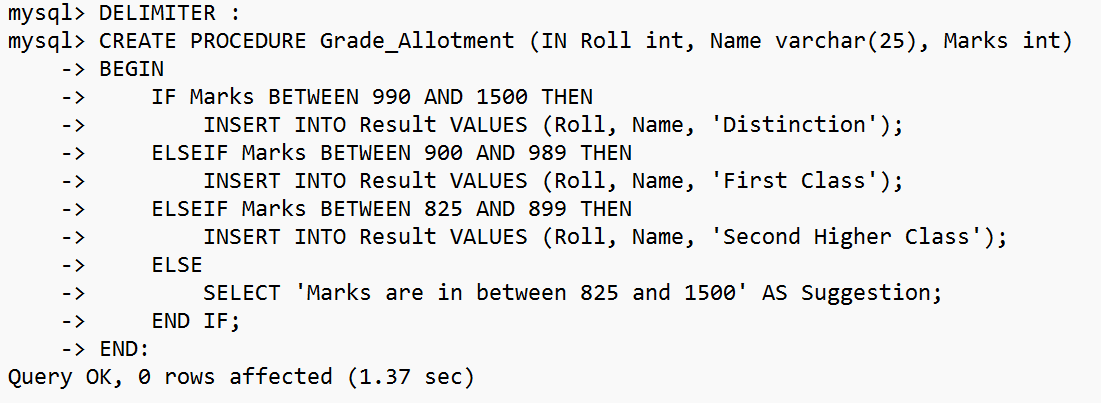
-> INSERT INTO Result VALUES ( name, 'Second Higher Class');

-> ELSE

-> SELECT 'marks are in between 825 and 1500' AS Suggestion;

-> END IF;

-> END:



Procedure: Insert\_Records

mysql> CREATE PROCEDURE Insert\_Records (IN Roll int, Name varchar(25), Marks int)

-> BEGIN

-> IF Marks BETWEEN 825 AND 1500 THEN

-> INSERT INTO Student\_Marks VALUES(Roll, Name, Marks);

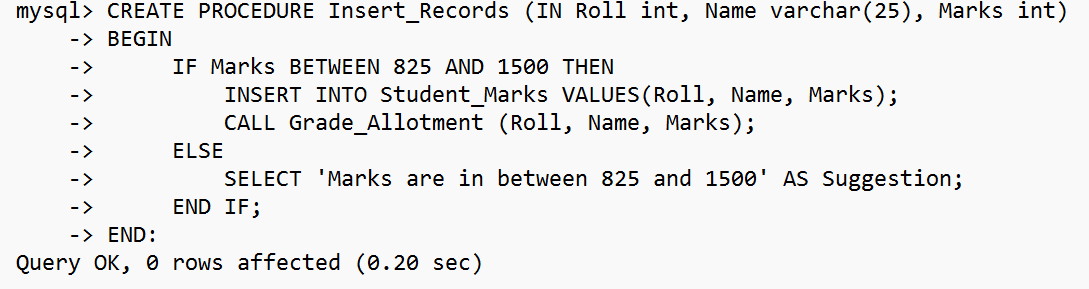
-> CALL Grade\_Allotment (Roll, Name, Marks);

-> ELSE

-> SELECT 'Marks are in between 825 and 1500' AS Suggestion;

-> END IF;

-> END:



Inserting Records

mysql> DELIMITER ;

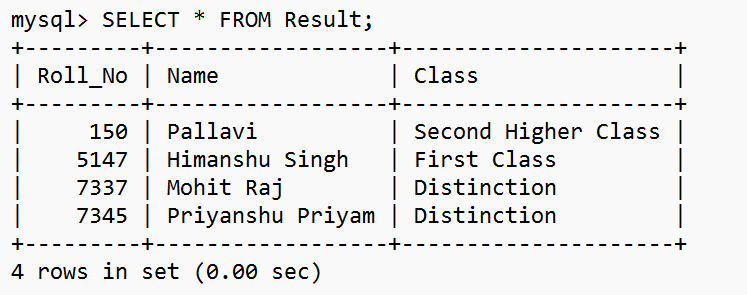
mysql> CALL Insert\_Records (7337, 'Mohit Raj', 1200);

mysql> CALL Insert\_Records (5147, 'Himanshu Singh', 925);

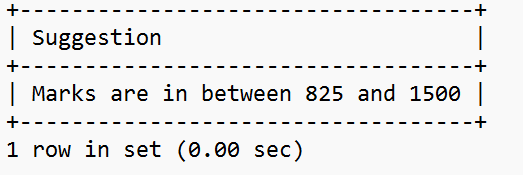
mysql> CALL Insert\_Records (7345, 'Priyanshu Priyam', 1400);

mysql> CALL Insert\_Records (150, 'Pallavi', 850);

Displaying Records



mysql> CALL Insert\_Records (7329, 'Alex', 810);



DELIMITER //

DROP PROCEDURE IF EXISTS proc\_Grade //

CREATE PROCEDURE proc\_Grade (IN r\_num INTEGER, IN nme VARCHAR(30))

BEGIN

DECLARE mks INTEGER;

DECLARE cls VARCHAR(30);

SELECT Total\_Marks INTO mks FROM Stud\_Marks WHERE Roll = r\_num AND Name = nme;

CASE

WHEN mks >= 990 AND mks <= 1500 THEN SET cls = "Distinction";

WHEN mks >= 900 AND mks <= 989 THEN SET cls = "First Class";

WHEN mks >= 825 AND mks <= 899 THEN SET cls = "HS Class";

WHEN mks < 825 THEN SET cls = "PASS";

END CASE;

INSERT INTO Result VALUES(r\_num, nme, cls);

SELECT r\_num AS ROLL, nme AS NAME, cls AS CLASS;

END //