**ASSIGNMENT NO : 07**

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***Problem Statement:-***PL/SQL Stored procedure and Stored function . Write a Stored procedure namely proc\_grade for the categorization of student . If marks scored by student 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 for using procedure created with above requirements.

1.Stud\_Marks(name,total\_marks) 2.Result(roll,name,class)

**\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\***

MariaDB [(none)]> create database ASS7;

Query OK, 1 row affected (0.01 sec)

MariaDB [(none)]> use ASS7;

Database changed

MariaDB [ASS7]> CREATE TABLE STUD\_MARKS (ROLL\_NO INT PRIMARY KEY, NAME CHAR(10), TOTAL\_MARKS INT );

Query OK, 0 rows affected (0.06 sec)

mysql> CREATE TABLE RESULT (ROLL\_NO INTEGER(10),NAME VARCHAR (10),CLASS CHAR (10));

Query OK, 0 rows affected (0.37 sec)

MariaDB [ASS7]> INSERT INTO STUD\_MARKS (ROLL\_NO,NAME,TOTAL\_MARKS) VALUES

(101,'abc',933),

(102,'xyz',356),

(103,'mnk',450),

(104,'pqr',675),

(105,'snk',1300),

(106,'jnk',250);

Query OK, 6 rows affected (0.01 sec)

Records: 6 Duplicates: 0 Warnings: 0

MariaDB [ASS7]> SELECT \* FROM STUD\_MARKS;

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

| ROLL\_NO | NAME | TOTAL\_MARKS |

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

| 101 | abc | 933 |

| 102 | xyz | 356 |

| 103 | mnk | 450 |

| 104 | pqr | 675 |

| 105 | snk | 1300 |

| 106 | jnk | 250 |

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

6 rows in set (0.00 sec)

DELIMITER //

CREATE PROCEDURE PROC\_GRADE(IN MARKS INT(10),OUT CLASS CHAR(10))

BEGIN

IF MARKS<=1500 AND MARKS>=990 THEN SET CLASS='DIST';

END IF;

IF MARKS<=989 AND MARKS>=900 THEN SET CLASS='FC';

END IF;

IF MARKS<=899 AND MARKS>=825 THEN SET CLASS='HSC';

END IF;

IF MARKS<=824 AND MARKS>=750 THEN SET CLASS='SC';

END IF;

IF MARKS<=749 AND MARKS>=651 THEN SET CLASS='PC';

END IF;

IF MARKS<=650 THEN SET CLASS='FAIL';

END IF;

END;

//

Query OK, 0 rows affected (0.31 sec)

DELIMITER //

CREATE FUNCTION FIND\_RESULT (ROLL\_IN INT(5)) RETURNS INT DETERMINISTIC

BEGIN

DECLARE FMARKS INT;

DECLARE GRADE CHAR(10);

DECLARE STUD\_NAME CHAR(10);

SELECT STUD\_MARKS.TOTAL\_MARKS,STUD\_MARKS.NAME INTO FMARKS,STUD\_NAME FROM

STUD\_MARKS WHERE STUD\_MARKS.ROLL\_NO=ROLL\_IN;

CALL PROC\_GRADE(FMARKS,@GRADE);

INSERT INTO RESULT VALUES (ROLL\_IN,STUD\_NAME,@GRADE);

RETURN ROLL\_IN;

END;

//

Query OK, 0 rows affected (0.00 sec)

mysql> SELECT FIND\_RESULT (104); //

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

| FIND\_RESULT (104) |

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

| 104 |

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

1 row in set (0.33 sec)

mysql> SELECT \* FROM RESULT; //

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

| ROLL\_NO | NAME | CLASS |

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

| 104 | pqr | PC |

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

1 row in set (0.00 sec)

mysql> SELECT FIND\_RESULT (101); //

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

| FIND\_RESULT (101) |

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

| 101 |

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

1 row in set (0.33 sec)

mysql> SELECT \* FROM RESULT; //

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

| ROLL\_NO | NAME | CLASS |

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

| 104 | pqr | PC |

| 101 | abc | FC |

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

2 rows in set (0.00 sec)

mysql> SELECT FIND\_RESULT (106); //

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

| FIND\_RESULT (106) |

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

| 106 |

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

1 row in set (0.48 sec)

mysql> SELECT \* FROM RESULT; //

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

| ROLL\_NO | NAME | CLASS |

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

| 104 | pqr | PC |

| 101 | abc | FC |

| 106 | jnk | FAIL |

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

3 rows in set (0.00 sec)

mysql> SELECT FIND\_RESULT (102); //

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

| FIND\_RESULT (102) |

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

| 102 |

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

1 row in set (0.06 sec)

mysql> SELECT \* FROM RESULT; //

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

| ROLL\_NO | NAME | CLASS |

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

| 104 | pqr | PC |

| 101 | abc | FC |

| 106 | jnk | FAIL |

| 102 | xyz | FAIL |

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

4 rows in set (0.00 sec)

mysql> SELECT FIND\_RESULT (103); //

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

| FIND\_RESULT (103) |

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

| 103 |

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

1 row in set (0.34 sec)

mysql> SELECT \* FROM RESULT; //

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

| ROLL\_NO | NAME | CLASS |

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

| 104 | pqr | PC |

| 101 | abc | FC |

| 106 | jnk | FAIL |

| 102 | xyz | FAIL |

| 103 | mnk | FAIL |

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

5 rows in set (0.00 sec)

mysql> SELECT FIND\_RESULT (105); //

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

| FIND\_RESULT (105) |

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

| 105 |

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

1 row in set (0.64 sec)

mysql> SELECT \* FROM RESULT; //

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

| ROLL\_NO | NAME | CLASS |

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

| 104 | pqr | PC |

| 101 | abc | FC |

| 106 | jnk | FAIL |

| 102 | xyz | FAIL |

| 103 | mnk | FAIL |

| 105 | snk | DIST |

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

6 rows in set (0.01 sec)

**\*\*\*\*\*\***