**ASSIGNMENT NO-6 :SOLUTION**

mysql> create database marks;

Query OK, 1 row affected (0.01 sec)

mysql> use marks;

Database changed

mysql> create table studmarks(name varchar(20),total\_marks integer);

Query OK, 0 rows affected (0.03 sec)

mysql> create table result(roll\_no integer,name varchar(20),class varchar(25));

Query OK, 0 rows affected (0.03 sec)

mysql> select \* from studmarks;

Empty set (0.00 sec)

mysql> select \* from result;

Empty set (0.00 sec)

mysql> delimiter //

**PROCEDURE**

mysql> create procedure proc\_grade(in rollno tinyint, in name varchar(15), in marks int)

-> begin

-> declare class varchar(25);

-> if marks>=990 and marks<=1500 then set class="Distinction";

-> elseif marks<=989 and marks>=900 then set class="First Class";

-> elseif marks<=899 and marks>=825 then set class="Second Class";

-> elseif marks<=824 and marks>=700 then set class="Pass";

-> else

-> set class="Fail";

-> end if;

-> insert into studmarks values(name,marks);

-> insert into result values(rollno,name,class);

-> end;

-> //

Query OK, 0 rows affected (0.01 sec)

mysql> call proc\_grade(1,"Aryan",850);

-> //

Query OK, 1 row affected (0.01 sec)

mysql> select \* from studmarks;

-> //

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

| name | total\_marks |

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

| Aryan | 850 |

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

1 row in set (0.00 sec)

mysql> select \* from result;

-> //

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

| roll\_no | name | class |

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

| 1 | Aryan | Second Class |

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

1 row in set (0.00 sec)

mysql> call proc\_grade(2,"Peter",1000);//

Query OK, 1 row affected (0.01 sec)

mysql> select \* from studmarks;//

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

| name | total\_marks |

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

| Aryan | 850 |

| Peter | 1000 |

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

2 rows in set (0.00 sec)

mysql> select \* from result;//

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

| roll\_no | name | class |

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

| 1 | Aryan | Second Class |

| 2 | Peter | Distinction |

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

2 rows in set (0.00 sec)

mysql> call proc\_grade(3,"Smith",834);//

Query OK, 1 row affected (0.01 sec)

mysql> select \* from studmarks;//

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

| name | total\_marks |

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

| Aryan | 850 |

| Peter | 1000 |

| Smith | 834 |

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

3 rows in set (0.00 sec)

mysql> select \* from result;//

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

| roll\_no | name | class |

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

| 1 | Aryan | Second Class |

| 2 | Peter | Distinction |

| 3 | Smith | Second Class |

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

3 rows in set (0.00 sec)

mysql> call proc\_grade(4,"Carol",750);//

Query OK, 1 row affected (0.01 sec)

mysql> select \* from studmarks;//

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

| name | total\_marks |

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

| Aryan | 850 |

| Peter | 1000 |

| Smith | 834 |

| Carol | 750 |

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

4 rows in set (0.00 sec)

mysql> select \* from result;//

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

| roll\_no | name | class |

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

| 1 | Aryan | Second Class |

| 2 | Peter | Distinction |

| 3 | Smith | Second Class |

| 4 | Carol | Pass |

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

4 rows in set (0.00 sec)

mysql> call proc\_grade(5,"Bob",950);//

Query OK, 1 row affected (0.01 sec)

mysql> select \* from studmarks;//

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

| name | total\_marks |

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

| Aryan | 850 |

| Peter | 1000 |

| Smith | 834 |

| Carol | 750 |

| Bob | 950 |

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

5 rows in set (0.00 sec)

mysql> select \* from result;//

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

| roll\_no | name | class |

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

| 1 | Aryan | Second Class |

| 2 | Peter | Distinction |

| 3 | Smith | Second Class |

| 4 | Carol | Pass |

| 5 | Bob | First Class |

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

5 rows in set (0.00 sec)

**FUNCTION:**

create function tot\_stud(classname varchar(25)) returns int DETERMINISTIC

BEGIN

DECLARE total INT;

SELECT DISTINCT COUNT(\*) INTO total FROM result where class=classname;

return total;

end;

mysql> create function tot\_stud(classname varchar(25)) returns int DETERMINISTIC

-> BEGIN

-> DECLARE total INT;

-> SELECT DISTINCT COUNT(\*) INTO total FROM result where class=classname;

-> return total;

-> end;

-> //

Query OK, 0 rows affected (0.01 sec)

mysql> select tot\_stud("Second Class");//

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

| tot\_stud("Second Class") |

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

| 2 |

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

1 row in set (0.00 sec)

mysql> select tot\_stud("Pass");//

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

| tot\_stud("Pass") |

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

| 1 |

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

1 row in set (0.00 sec)

mysql> select tot\_stud("First Class");//

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

| tot\_stud("First Class") |

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

| 1 |

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

1 row in set (0.00 sec)

**Conclusion:**

In this assignment we have studied about stored procedures and functions in PLSQL and implemented the same to solve given problem statement.