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ROLL NO: 153

Div : A

Batch : AS4

Assignment No :05

TITLE: PL/SQL Stored Procedure and Stored Function.

Write a Stored Procedure namely proc_Grade 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 and900 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 requirement.

Stud_Marks(name, total_marks)

Result(Roll,Name, Class)

Frame the separate problem statement for writing PL/SQL Stored Procedure and function, inline with above statement. The problem statement should clearly state the requirements.

```
mysql> use Aditi;

Reading table information for completion of table and column
names

You can turn off this feature to get a quicker startup with -A


Database changed

mysql> create table marks(roll_no int,name
varchar(20),total_marks varchar(20));

Query OK, 0 rows affected (0.67 sec)


mysql> create table result(roll_no int,name varchar(20),class
varchar(20));

Query OK, 0 rows affected (0.41 sec)


insert into marks values('1','Abhi',1400')' at line 1

mysql> insert into marks values('1','Abhi','1400');Query OK, 1
row affected (0.04 sec)
```

```
mysql> insert into marks values('2','piyush','980');
Query OK, 1 row affected (0.08 sec)

mysql> insert into marks values('3','hitesh','880');
Query OK, 1 row affected (0.08 sec)

mysql> insert into marks values('4','ashley','820');
Query OK, 1 row affected (0.08 sec)

mysql> insert into marks values('5','partik','740');
Query OK, 1 row affected (0.03 sec)

mysql> insert into marks values('6','patil','640');
Query OK, 1 row affected (0.08 sec)

mysql> delimiter //
mysql> create procedure proc_result(in marks int,out class
char(20))
    -> begin
    -> if(marks<1500&&marks>990)
    -> then
    -> set class='Distincton';
    -> end if;
    -> if(marks<989&&marks>890)
    -> then
    -> set class='First Class';
    -> end if;
    -> if(marks<889&&marks>825)
    -> then
    -> set class='Higher Second Class';
    -> end if;
    -> if(marks<824&&marks>750)
    -> then
    -> set class='Second Class';
```

```
    -> end if;if(marks<749&&marks>650)
    -> then
    -> set class='Passed';
    -> end if;
    -> if(marks<649)
    -> then
    -> set class='Fail';
    -> end if;
    -> end;
    -> //
Query OK, 0 rows affected (0.00 sec)

mysql> create function final_result3(R1 int)
    -> returns int
    -> begin
    -> declare fmarks integer;
    -> declare grade varchar(20);
    -> declare stud_name varchar(20);
    -> select marks.total_marks,marks.name into
fmarks,stud_name from marks where marks.roll_no=R1;
    -> call proc_grade(fmarks,@grade);
    -> insert into result values(R1,stud_name,@grade);
    -> return R1;
    -> end;
    -> //
Query OK, 0 rows affected (0.00 sec)

mysql> select final_result3(2);
    -> //
+------------------+
| final_result3(2) |
+------------------+
```

```
|                2 |
+------------------+
1 row in set (0.05 sec)

mysql> select final_result3(3);//
+------------------+
| final_result3(3) |
+------------------+
|                3 |
+------------------+
1 row in set (0.04 sec)

mysql> select final_result3(4);//
+------------------+
| final_result3(4) |
+------------------+
|                4 |
+------------------+
1 row in set (0.12 sec)

mysql> select final_result3(5);//
+------------------+
| final_result3(5) |
+------------------+
|                5 |
+------------------+
1 row in set (0.05 sec)

mysql> select * from result;
    -> //
+---------+--------+---------------------+
| roll_no | name   | class               |
```

```
+---------+--------+---------------------+
|       1 | NULL   | Distincton          |
|       1 | Abhi   | Distincton          |
|       1 | Abhi   | Distincton          |
|       2 | piyush | First Class         |
|       3 | hitesh | Higher Second Class |
|       4 | ashley | Second Class        |
|       5 | partik | Passed              |
+---------+--------+---------------------+
7 rows in set (0.00 sec)
```