AIM: Named PL/SQL Block: 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.

TABLES


```
mysql> SELECT * FROM stud_marks;
+--------+-------------+
| name   | total_marks |
+--------+-------------+
| Tejas  |         995 |
| Hitesh |         865 |
| Rahul  |         920 |
| Sujal  |        1000 |
| Mohit  |         745 |
+--------+-------------+
5 rows in set (0.00 sec)
```


```
mysql> SELECT * FROM Result;
+---------+--------+-------+
| roll_no | name   | class |
+---------+--------+-------+
|       1 | Tejas  | NULL  |
|       2 | Hitesh | NULL  |
|       3 | Rahul  | NULL  |
|       4 | Sujal  | NULL  |
|       5 | Mohit  | NULL  |
+---------+--------+-------+
5 rows in set (0.00 sec)
```

PROCUDURE

```
mysql> create procedure proc_Grade(in r int(2) , out grade char(25))
    → begin
    → declare m int(4);
    → select total_marks into m from stud_marks where name =(select name from Result where roll_no = r);
    → if m≥990 and m≤1500 the
    → select 'Distinction' into grade;
    → update Result set Class ='Distinction' where Roll_no = r;
    → elseif m≥900 and m≤989 then
    → select 'FirstClass' into grade;
    → update Result set Class='FirstClass' where Roll_no = r;
    → elseif m≥825 and m≤899 then
    → select 'SecondClass' into grade;
    → update Result set Class='SecondClass' where Roll_no = r;
    → else
    → select '--' into grade;
    → update Result set Class='--' where Roll_no = r;
    → end if;
    → end $$
```

FUNCTION

```
mysql>
mysql> create function func_grade(r int (2))
    -> returns varchar(25)
    -> deterministic
    -> begin
    -> declare grade varchar(25);
    -> call proc_Grade(r,grade);
    -> return grade;
    -> end//
Query OK, 0 rows affected, 1 warning (0.01 sec)
```

FUNCTION CALL

```
mysql> select func_grade(1);
    -> select func_grade(2);
    -> select func_grade(3);
    -> select func_grade(4);
    -> select func_grade(5);//
+----------------+
| func_grade(1)  |
+----------------+
| Distinction    |
+----------------+
1 row in set (0.00 sec)

+----------------+
| func_grade(2)  |
+----------------+
| SecondClass    |
+----------------+
1 row in set (0.01 sec)

+----------------+
| func_grade(3)  |
+----------------+
| FirstClass     |
+----------------+
1 row in set (0.02 sec)

+----------------+
| func_grade(4)  |
+----------------+
| Distinction    |
+----------------+
1 row in set (0.02 sec)

+----------------+
| func_grade(5)  |
+----------------+
| --             |
+----------------+
1 row in set (0.03 sec)

mysql> select * from Result; //
+---------+--------+-------------+
| roll_no | name   | class       |
+---------+--------+-------------+
|       1 | Tejas  | Distinction |
|       2 | Hitesh | SecondClass |
|       3 | Rahul  | FirstClass  |
|       4 | Sujal  | Distinction |
|       5 | Mohit  | --          |
+---------+--------+-------------+
5 rows in set (0.00 sec)
```