**Practical No.5 Code**

atharva@atharva-mac:~$ sudo mysql [sudo]
password for atharva:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 8
Server version: 8.0.34-0ubuntu0.22.04.1 (Ubuntu) Copyright
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Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.


mysql> USE ATHARVA; Database
changed


mysql> CREATE TABLE Stud_Marks(Name VARCHAR(10),Total_marks INT, Roll INT); Query
OK, 0 rows affected (15.88 sec)


mysql> CREATE TABLE Result(Roll INT,Name VARCHAR(10), Class VARCHAR(30)); Query
OK, 0 rows affected (0.22 sec)


```
mysql> desc Stud_Marks;
+-------------+-------------+------+-----+---------+-------+
| Field       | Type        | Null | Key | Default | Extra |
+-------------+-------------+------+-----+---------+-------+
| Name        | varchar(10) | YES  |     | NULL    |       |
| Total_marks | int         | YES  |     | NULL    |       |
| Roll        | int         | YES  |     | NULL    |       |
+-------------+-------------+------+-----+---------+-------+
2 rows in set (0.07 sec)
```

mysql> desc Result;
```
+-------+-------------+------+-----+---------+-------+
| Field | Type        | Null | Key | Default | Extra |
+-------+-------------+------+-----+---------+-------+
| Roll  | int         | YES  |     | NULL    |       |
| Name  | varchar(10) | YES  |     | NULL    |       |
| Class | varchar(30) | YES  |     | NULL    |       |
+-------+-------------+------+-----+---------+-------+
```
3 rows in set (0.00 sec)

```
mysql> INSERT INTO Stud_Marks VALUES('Rajesh',991,01),('Shubham',901,02),('Saurabh',826,03);
    -> //
Query OK, 3 rows affected (0.01 sec)
Records: 3  Duplicates: 0  Warnings: 0




mysql> SELECT * FROM Stud_Marks;
    -> //
+----------+-------------+------+
| Name     | Total_marks | Roll |
+----------+-------------+------+
| Rajesh   |         991 |    1 |
| Shubham  |         901 |    2 |
| Saurabh  |         826 |    3 |
+----------+-------------+------+ 3
rows in set (0.00 sec)




mysql> delimiter //
mysql> CREATE PROCEDURE proc_Grade(IN Total_marks INT,OUT Class VARCHAR(30))
-> BEGIN IF(Total_marks<=1500 && Total_marks>=990) THEN SET Class="Distinction";
   -> ELSEIF(Total_marks<=989 && Total_marks>=900) THEN SET Class="First Class";
   -> ELSEIF(Total_marks<=899 && Total_marks>=825) THEN SET Class="Higher Second Class";
-> ELSE SET Class="Fail";
   -> END IF;
   -> END;
-> //


Query OK, 0 rows affected, 3 warnings (0.72 sec)




mysql> SET GLOBAL log_bin_trust_function_creators=1;
    -> //
Query OK, 0 rows affected, 1 warning (0.00 sec)




mysql> CREATE FUNCTION F4R(X INT) RETURNS INT
   -> BEGIN DECLARE tmp_Marks INT; DECLARE tmp_Name VARCHAR(10); DECLARE tmp_Grade
VARCHAR(10);
   -> SELECT Stud_Marks.Total_marks, Stud_Marks.Name INTO tmp_Marks,tmp_Name FROM
Stud_Marks WHERE Stud_Marks.Roll=X;
   -> CALL proc_Grade(tmp_Marks,@tmp_Grade);
   -> INSERT INTO Result VALUES(X,tmp_Name,@tmp_Grade);
```

```
   -> RETURN X;
   -> END;
-> //
```

Query OK, 0 rows affected (0.02 sec)


```
mysql> SELECT F4R(1);
   -> //
+--------+
| F4R(1) |
+--------+
|      1 |
+--------+
```
1 row in set (0.06 sec)

```
mysql> SELECT F4R(2);
   -> //
+--------+
| F4R(2) |
+--------+
|      2 |
+--------+   1 row in
```
set (0.01 sec)


```
mysql> SELECT F4R(3); //
+--------+
| F4R(3) |
+--------+
|      3 |
+--------+  1 row in
```
set (0.01 sec)


```
mysql> SELECT * FROM Result;
   -> //
+------+---------+---------------------+
| Roll | Name    | Class               |
+------+---------+---------------------+
|    1 | Rajesh  | Distinction         |
|    2 | Shubham | First Class         |
|    3 | Saurabh | Higher Second Class |
+------+---------+---------------------+ 3
```
rows in set (0.00 sec)


**************************************************************************************

```
                                    shriharsh@shriharsh-mac: ~

shriharsh@shriharsh-mac: ~ $ sudo mysql
[sudo] password for shriharsh:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 10
Server version: 8.0.34-0ubuntu0.22.04.1 (Ubuntu)

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owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> USE SHRIHARSH;
Database changed
mysql> CREATE TABLE Stud_Marks(Name VARCHAR(10),Total_marks INT, Roll INT);
Query OK, 0 rows affected (13.67 sec)

mysql> CREATE TABLE Result(Roll INT,Name VARCHAR(10), Class VARCHAR(30));
Query OK, 0 rows affected (16.40 sec)

mysql> desc Stud_Marks;
+-------------+-------------+------+-----+---------+-------+
| Field       | Type        | Null | Key | Default | Extra |
+-------------+-------------+------+-----+---------+-------+
| Name        | varchar(10) | YES  |     | NULL    |       |
| Total_marks | int         | YES  |     | NULL    |       |
| Roll        | int         | YES  |     | NULL    |       |
+-------------+-------------+------+-----+---------+-------+
3 rows in set (0.00 sec)
```

```
shriharsh@shriharsh-mac: ~

mysql> desc Result;
+-------+-------------+------+-----+---------+-------+
| Field | Type        | Null | Key | Default | Extra |
+-------+-------------+------+-----+---------+-------+
| Roll  | int         | YES  |     | NULL    |       |
| Name  | varchar(10) | YES  |     | NULL    |       |
| Class | varchar(30) | YES  |     | NULL    |       |
+-------+-------------+------+-----+---------+-------+
3 rows in set (0.00 sec)

mysql> INSERT INTO Stud_Marks VALUES('Rajesh',991,01),('Shubham',901,02),('Saurabh',826,03);
Query OK, 3 rows affected (2.28 sec)
Records: 3  Duplicates: 0  Warnings: 0

mysql> SELECT * FROM Stud_Marks;
+---------+-------------+------+
| Name    | Total_marks | Roll |
+---------+-------------+------+
| Rajesh  |         991 |    1 |
| Shubham |         901 |    2 |
| Saurabh |         826 |    3 |
+---------+-------------+------+
3 rows in set (0.00 sec)

mysql> delimiter //
mysql> CREATE PROCEDURE proc_Grade(IN Total_marks INT,OUT Class VARCHAR(30))
    -> BEGIN IF(Total_marks<=1500 && Total_marks>=990) THEN SET Class="Distinction";
    -> ELSEIF(Total_marks<=989 && Total_marks>=900) THEN SET Class="First Class";
    -> ELSEIF(Total_marks<=899 && Total_marks>=825) THEN SET Class="Higher Second Class";
    -> ELSE SET Class="Fail";
    -> END IF;
    -> END;
    -> //
Query OK, 0 rows affected, 3 warnings (2.64 sec)

mysql> SET GLOBAL log_bin_trust_function_creators=1;
    -> //
Query OK, 0 rows affected, 1 warning (0.00 sec)

mysql> CREATE FUNCTION F4R(X INT) RETURNS INT
    -> BEGIN DECLARE tmp_Marks INT; DECLARE tmp_Name VARCHAR(10); DECLARE tmp_Grade VARCHAR(10);
    -> SELECT Stud_Marks.Total_marks, Stud_Marks.Name INTO tmp_Marks,tmp_Name FROM Stud_Marks WHERE Stud_Marks.Roll=X;
    -> CALL proc_Grade(tmp_Marks,@tmp_Grade);
    -> INSERT INTO Result VALUES(X,tmp_Name,@tmp_Grade);
    -> RETURN X;
    -> END;
    -> //
Query OK, 0 rows affected (0.02 sec)

mysql> SELECT F4R(1);
    -> //
+--------+
| F4R(1) |
+--------+
|      1 |
+--------+
1 row in set (0.02 sec)

mysql> SELECT F4R(2);
    -> //
+--------+
| F4R(2) |
+--------+
|      2 |
+--------+
1 row in set (0.01 sec)

mysql> SELECT F4R(3);
    -> //
+--------+
| F4R(3) |
+--------+
|      3 |
+--------+
1 row in set (1.24 sec)

mysql> SELECT * FROM Result;
    -> //
+------+---------+---------------------+
| Roll | Name    | Class               |
+------+---------+---------------------+
|    1 | Rajesh  | Distinction         |
|    2 | Shubham | First Class         |
|    3 | Saurabh | Higher Second Class |
+------+---------+---------------------+
3 rows in set (0.00 sec)
```