

Output: Using Procedure

```
Select Command Prompt - mysql -u root -p
mysql>
mysql> create database A5;
Query OK, 1 row affected (0.01 sec)

mysql> use A5;
Database changed
mysql> create table stud_marks(
  ->   roll_no int PRIMARY KEY,
  ->   name varchar(100),
  ->   marks int
  -> );
Query OK, 0 rows affected (0.08 sec)

mysql>
mysql> insert into stud_marks (roll_no, name, marks) values (1,'Amit',1450),(2,'Beena',980),(3,'Chetan',920),(4,'Divya',860),(5,'Isha',400);
Query OK, 5 rows affected (0.00 sec)
Records: 5  Duplicates: 0  Warnings: 0

mysql>
mysql> create table result_table(
  ->   roll_no int ,
  ->   name varchar(100),
  ->   class varchar(50)
  -> );
Query OK, 0 rows affected (0.02 sec)
```

```
Select Command Prompt - mysql -u root -p
mysql>
mysql> delimiter //
mysql> create procedure proc_grade(in p_roll int,in p_name varchar(100),in p_marks int)
  -> begin
  ->   declare v_class varchar(50);
  ->   if p_marks is null or p_marks<0 or p_marks>1500 then
  ->     set v_class = 'Invalid';
  ->
  ->   elseif p_marks between 990 and 1500 then
  ->     set v_class = 'Distinction';
  ->   elseif p_marks between 900 and 989 then
  ->     set v_class = 'First Class';
  ->   elseif p_marks between 825 and 899 then
  ->     set v_class = 'Higher Second Class';
  ->   elseif p_marks between 600 and 824 then
  ->     set v_class = 'Second Class';
  ->   elseif p_marks between 400 and 599 then
  ->     set v_class = 'Pass';
  ->   else
  ->     set v_class = 'Fail';
  ->   end if;
  ->   insert into result_table(roll_no, name, class) values (p_roll, p_name, v_class);
  -> end ;
  -> //
Query OK, 0 rows affected (0.01 sec)

mysql>
mysql> delimiter ;
mysql>
mysql> call proc_grade(1,'Amit',1450);
Query OK, 1 row affected (0.01 sec)

mysql> call proc_grade(2,'Beena',980);
Query OK, 1 row affected (0.00 sec)

mysql>
mysql> select * from result_table;
+-----+-----+-----+
| roll_no | name | class |
+-----+-----+-----+
| 1 | Amit | Distinction |
| 2 | Beena | First Class |
+-----+-----+-----+
2 rows in set (0.00 sec)
```

Using Function:

```
Command Prompt - mysql -u root -p
mysql> create database A5_1;
Query OK, 1 row affected (0.01 sec)

mysql> use A5_1;
Database changed

mysql>
mysql> create table stud_marks(
->     roll_no int PRIMARY KEY,
->     name varchar(100),
->     marks int
-> );
Query OK, 0 rows affected (0.05 sec)

mysql>
mysql> insert into stud_marks (roll_no, name, marks) values (1,'Amit',1450),(2,'Beena',980),(3,'Chetan',920),(4,'Divya',860),(5,'Isha',400);
Query OK, 5 rows affected (0.01 sec)
Records: 5  Duplicates: 0  Warnings: 0

mysql>
mysql> create table result_table(
->     roll_no int ,
->     name varchar(100),
->     class varchar(50)
-> );
Query OK, 0 rows affected (0.03 sec)
```

```
Select Command Prompt - mysql -u root -p

mysql>
mysql> delimiter //
mysql> create function fproc_grade(p_marks int)
-> returns varchar(50)
-> deterministic
-> begin
->     declare v_class varchar(50);
->     if p_marks is null or p_marks<0 or p_marks>1500 then
->         set v_class = 'Invalid';
->     elseif p_marks between 990 and 1500 then
->         set v_class = 'Distinction';
->     elseif p_marks between 900 and 989 then
->         set v_class = 'First Class';
->     elseif p_marks between 825 and 899 then
->         set v_class = 'Higher Second Class';
->     elseif p_marks between 600 and 824 then
->         set v_class = 'Second Class';
->     elseif p_marks between 400 and 599 then
->         set v_class = 'Pass';
->     else
->         set v_class = 'Fail';
->     end if;
->
->     return v_class;
-> end ;
-> //
Query OK, 0 rows affected (0.01 sec)

mysql> delimiter ;
mysql>
mysql> /*
/*> delimiter //
/*> create procedure callf_proc_grade(in p_roll int,in p_name varchar(100),in p_marks int)
/*> begin
/*>     insert into result_table(roll_no, name, class) values (p_roll, p_name, fproc_grade(p_marks));
/*> end ;
/*> //
/*> delimiter ;
/*> call callf_proc_grade(3,'Chetan',920);
/*> call callf_proc_grade(5,'Isha',400);
/*>
/*> select * from result_table;
/*> */
mysql>
```

```

Select Command Prompt - mysql -u root -p
mysql> select roll_no, name, fproc_grade(marks) as class from stud_marks;
+-----+-----+-----+
| roll_no | name  | class                |
+-----+-----+-----+
| 1       | Amit  | Distinction          |
| 2       | Beena | First Class          |
| 3       | Chetan| First Class          |
| 4       | Divya | Higher Second Class  |
| 5       | Isha  | Pass                 |
+-----+-----+-----+
5 rows in set (0.00 sec)

mysql>
mysql> insert into result_table(roll_no, name, class)
-> select roll_no, name, fproc_grade(marks) from stud_marks;
Query OK, 5 rows affected (0.00 sec)
Records: 5 Duplicates: 0 Warnings: 0

mysql>
mysql> select * from result_table;
+-----+-----+-----+
| roll_no | name  | class                |
+-----+-----+-----+
| 1       | Amit  | Distinction          |
| 2       | Beena | First Class          |
| 3       | Chetan| First Class          |
| 4       | Divya | Higher Second Class  |
| 5       | Isha  | Pass                 |
+-----+-----+-----+
5 rows in set (0.00 sec)

```