

```
mysql> DELIMITER //
mysql> CREATE FUNCTION CustomerLevel(p_CREDITLIMIT INT) RETURNS VARCHAR(10)
-> DETERMINISTIC
-> BEGIN
-> DECLARE lvl VARCHAR(10);
-> IF p_CREDITLIMIT > 50000 THEN
-> SET lvl = 'PLATINUM';
-> ELSEIF (p_CREDITLIMIT <= 50000 AND p_CREDITLIMIT >= 10000) THEN
-> SET lvl = 'GOLD';
-> ELSEIF p_CREDITLIMIT < 10000 THEN
-> SET lvl = 'SILVER';
-> END IF;
-> RETURN (lvl);
-> END
-> //
```

Query OK, 0 rows affected (0.00 sec)

```
mysql> SELECT NAME, CustomerLevel(CREDITLIMIT)
-> FROM CUSTOMER
-> ORDER BY NAME
-> //
```

ERROR 1054 (42S22): Unknown column 'NAME' in 'field list'

```
mysql> SELECT CNAME, CustomerLevel(CREDITLIMIT)
-> FROM CUSTOMER
-> ORDER BY NAME
-> //
```

ERROR 1054 (42S22): Unknown column 'NAME' in 'order clause'

```
mysql> SELECT CNAME, CustomerLevel(CREDITLIMIT) FROM CUSTOMER ORDER BY CNAME//
```

| CNAME    | CustomerLevel(CREDITLIMIT) |
|----------|----------------------------|
| DINESH   | GOLD                       |
| NAGENDRA | PLATINUM                   |
| RAJA     | GOLD                       |
| RAMU     | SILVER                     |

4 rows in set (0.00 sec)

```
mysql> CREATE FUNCTION CustomerLevel(p_CREDITLIMIT INT) RETURNS VARCHAR(10)
-> DETERMINISTIC
-> BEGIN
-> DECLARE lvl VARCHAR(10);
-> IF p_CREDITLIMIT > 50000 THEN
-> SET lvl = 'PLATINUM';
-> ELSEIF (p_CREDITLIMIT <= 50000 AND p_CREDITLIMIT >= 10000) THEN
-> SET lvl = 'GOLD';
-> ELSEIF p_CREDITLIMIT < 10000 THEN
-> SET lvl = 'SILVER';
-> END IF;
-> RETURN (lvl);
-> END
-> //
```

Query OK, 0 rows affected (0.00 sec)

```
mysql> SELECT NAME, CustomerLevel(CREDITLIMIT)
-> FROM CUSTOMER
-> ORDER BY NAME
-> //
```

ERROR 1054 (42S22): Unknown column 'NAME' in 'field list'

```
mysql> SELECT CNAME, CustomerLevel(CREDITLIMIT)
-> FROM CUSTOMER
-> ORDER BY NAME
-> //
```

ERROR 1054 (42S22): Unknown column 'NAME' in 'order clause'

```
mysql> SELECT CNAME, CustomerLevel(CREDITLIMIT) FROM CUSTOMER ORDER BY CNAME//
```

| CNAME    | CustomerLevel(CREDITLIMIT) |
|----------|----------------------------|
| DINESH   | GOLD                       |
| NAGENDRA | PLATINUM                   |
| RAJA     | GOLD                       |
| RAMU     | SILVER                     |

4 rows in set (0.00 sec)

#### Program:-1

```
mysql> DELIMITER //
mysql> CREATE FUNCTION customerLevel(p_CREDITLIMIT INT) RETURNS VARCHAR(10)
-> DETERMINISTIC
-> BEGIN
-> DECLARE lvl varchar(10);
-> IF p_CREDITLIMIT > 50000 THEN
-> SET lvl='PLATINUM';
-> ELSEIF(p_CREDITLIMIT <=50000 AND p_CREDITLIMIT>=10000) THEN
-> SET lvl='GOLD';
-> ELSEIF p_CREDITLIMIT < 10000 THEN
-> SET lvl='SILVER';
-> END IF;
-> RETURN (lvl);
-> END
-> //
Query OK, 0 rows affected (0.00 sec)

mysql> SELECT NAME,customerLevel(CREDITLIMIT)
-> FROM CUSTOMER
-> ORDER BY NAME //
```

#### Program:-2

```
mysql> DELIMITER $$
mysql> CREATE PROCEDURE find_fact(IN n INT)
-> BEGIN
-> SET @@GLOBAL.max_sp_recursion_depth=255;
-> SET @@session.max_sp_recursion_depth=255;
-> CALL factorial(n,@fact);
-> SELECT @fact;
-> END
-> $$
Query OK, 0 rows affected (0.00 sec)

mysql> DELIMITER $$
mysql> CREATE PROCEDURE factorial(IN n INT,OUT fact INT)
-> BEGIN
-> IF n=1 THEN
-> SET fact:=1;
-> ELSE
-> CALL factorial(n-1,fact);
-> SET fact:=n*fact;
-> END IF;
-> END
-> $$
Query OK, 0 rows affected (0.01 sec)

mysql> CALL find_fact(5);
-> $$
+-----+
| @fact |
+-----+
| 120 |
+-----+
1 row in set (0.00 sec)

Query OK, 0 rows affected (0.01 sec)
```