

SAVEETHA SCHOOL OF ENGINEERING SAVEETHA INSTITUTE OF MEDICAL AND TECHNICAL SCIENCES CHENNAI – 602105



DBMS EXPERIMENT 18:

Create a function that returns the level of a customer based on credit limit. (Use the IF statement to determine the credit limit).

OUTPUT:

Progarm:-1

Progarm:-2

```
nysql> 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)
nysql> DELIMITER S$
nysql> 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
      -> 55
Query OK, 0 rows affected (0.01 sec)
nysql> CALL find_fact(5);
      -> 55
 @fact |
    129 I
1 row in set (0.00 sec)
Query OK, 0 rows affected (0.01 sec)
```

Progarm:-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 IVI ='COLD':
   > ELSEIF p_CREDITLIMIT < 19860 THEN
-> SCT lvl ='SLIVER';
-> END IF;
    -> RETURN (lvl);
    > END
    -> 11
Query OK, 0 rows affected (0.00 sec)
mysql> SELECT NAME,customerLevel(CREDITLIMIT)
    -> FROM CUSTOMER
    -> ORDER BY NAME //
```

Progarm:-2

```
nysql> DELIMITER S$
mysql> CREATE PROCEDURE find_fact(IN n INT)
    -> BEGIN
    -> SET @@GLOBAL.max_sp_recurston_depth=255;
    -> SET @@session.max_sp_recursion_depth=255;

-> CALL factorial(n,@fact);

-> SELECT @fact;
    -> END
    > 55
Query OK, 0 rows affected (0.00 sec)
mysql> DELIMITER S$
nysql> CREATE PROCEDURE factorial(IN n INT,OUT fact INT)
    -> BEGIN
    -> IF n=1 THEN
           SET fact:=1;
    -5
    -> ELSE
          CALL factorial(n-1, fact);
    +34
          SET fact:=n*fact;
    .>
        END IF;
    +36
    -> END
    > 55
Query OK, 0 rows affected (0.01 sec)
mysql> CALL find_fact(5);
    > 55
@fact |
   129 |
1 row in set (0.00 sec)
Query OK, 8 rows affected (8.81 sec)
```

```
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 (42522): Unknown column 'NAME' in 'field list'
mysql> SELECT CNAME, CustomerLevel(CREDITLIMIT)
   -> FROM CUSTOMER
   -> ORDER BY NAME
   -> //
ERROR 1054 (42522): 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)
```