

22. Write a recursive MySQL computing the factorial of a given number using high level programming Extension with **Functions**.

ANS:-

```
mysql>
mysql> DELIMITER ;
mysql> SELECT factorial(5);
ERROR 1424 (HY000): Recursive stored functions and triggers are not allowed.
mysql> DELIMITER //
mysql>
mysql> CREATE PROCEDURE factorial(IN n INT, OUT result INT)
    -> BEGIN
    ->     DECLARE i INT DEFAULT 1;
    ->     SET result = 1;
    ->
    ->     WHILE i <= n DO
    ->         SET result = result * i;
    ->         SET i = i + 1;
    ->     END WHILE;
    -> END//
Query OK, 0 rows affected (0.08 sec)

mysql>
mysql> DELIMITER ;
mysql> CALL factorial(5, @result);
Query OK, 0 rows affected (0.04 sec)

mysql> SELECT @result;
+-----+
| @result |
+-----+
|      120 |
+-----+
1 row in set (0.00 sec)
```