

Ex.no = 23 Write a recursive MySQL computing the factorial of a given number using high level programming Extension with **Functions**.

```
MySQL 8.0 Command Line CL
mysql> create database db;
Query OK, 1 row affected (0.01 sec)

mysql> use db;
Database changed
mysql> Delimiter //
mysql> CREATE PROCEDURE fact(IN x INT)
--> BEGIN
--> DECLARE result INT;
--> DECLARE i INT;
--> SET result = 1;
--> SET i = 1;
--> WHILE i <= x DO
--> SET result = result * i;
--> SET i = i + 1;
--> END WHILE;
--> SELECT x AS Number,result as Factorial;
--> END//
Query OK, 0 rows affected (0.02 sec)

mysql> Delimiter ;
mysql> CALL Fact(5);
+-----+
| Number | Factorial |
+-----+
| 5      | 120      |
+-----+
1 row in set (0.01 sec)

Query OK, 0 rows affected (0.01 sec)

mysql>
```