1]

mysql> CREATE FUNCTION CalculateFactorial(n INT) RETURNS INT

-> DETERMINISTIC

-> BEGIN

-> IF n <= 1 THEN

-> RETURN 1;

-> ELSE

-> RETURN n \* CalculateFactorial(n - 1);

-> END IF;

-> END //

Query OK, 0 rows affected (0.01 sec)

ii]

mysql> DELIMITER //

mysql>

mysql> CREATE PROCEDURE GetHighSalaryEmployees()

-> BEGIN

-> SELECT name, department, salary

-> FROM Employee

-> WHERE salary > 20000;

-> END //

Query OK, 0 rows affected (0.01 sec)

mysql>

mysql> DELIMITER ;

3]

mysql> DELIMITER //

mysql>

mysql> CREATE PROCEDURE GetEmployeeEmails()

-> BEGIN

-> DECLARE emp\_email VARCHAR(255);

-> DECLARE done BOOLEAN DEFAULT FALSE;

-> DECLARE email\_cursor CURSOR FOR SELECT email FROM employees;

->

-> OPEN email\_cursor;

->

-> read\_email\_loop: LOOP

-> FETCH email\_cursor INTO emp\_email;

-> IF done THEN

-> LEAVE read\_email\_loop;

-> END IF;

-> -- Process the data as needed

-> SELECT emp\_email;

->

-> END LOOP;

->

-> CLOSE email\_cursor;

-> END //

Query OK, 0 rows affected (0.01 sec)

mysql>

mysql> DELIMITER ;

4]

mysql> DELIMITER //

mysql>

mysql> CREATE FUNCTION GetCustomerLevel(credit\_limit INT) RETURNS VARCHAR(255)

-> BEGIN

-> IF credit\_limit > 50000 THEN

-> RETURN 'PLATINUM';

-> ELSEIF credit\_limit > 30000 THEN

-> RETURN 'GOLD';

-> ELSE

-> RETURN 'SILVER';

-> END IF;

-> END //

mysql>

mysql> DELIMITER ;

mysql>

5]

mysql> DELIMITER //

mysql>

mysql> CREATE PROCEDURE GetCustomerLevel(IN p\_customer\_number INT, OUT p\_customer\_level VARCHAR(255))

-> BEGIN

-> DECLARE credit\_limit INT;

-> SELECT credit\_limit INTO credit\_limit FROM customers WHERE customer\_number = p\_customer\_number;

->

-> SET p\_customer\_level = GetCustomerLevel(credit\_limit);

-> END //

Query OK, 0 rows affected (0.01 sec)

mysql>

mysql> DELIMITER ;