

q1

delimiter &&

create procedure fl(in x int , out result int)

```
-> begin
-> declare i int default 1;
-> set result =i;
-> while i<=x do
-> set result = result * i;
-> set i=i+1;
-> end while;
-> end&&
```

call fl(5,@g);

```
-> &&
```

select @g&&

```
+-----+
```

```
| @g |
```

```
+-----+
```

```
| 120 |
```

```
+-----+
```

1 row in set (0.00 sec)

create table employee (eid int , salary int);

insert into employee values (1,20),(2,30);

delimiter &&

mysql> create procedure increment()

```
-> begin
-> update employee set salary = salary *1.1 ;
-> select * from employee;
-> end &&
```

delimiter ;

mysql> call increment();

```
+-----+-----+
```

```
| eid | salary |
```

```
+-----+-----+
```

```
| 1 | 22 |
```

```
| 2 | 33 |
```

```
+-----+-----+
```

2 rows in set (0.02 sec)

Query OK, 0 rows affected (0.03 sec)

q3

```
mysql> DELIMITER $$
mysql> CREATE FUNCTION fibonacci(num INT)
  -> RETURNS INT
  -> DETERMINISTIC
  -> BEGIN
  ->   DECLARE fib1 INT DEFAULT 0;
  ->   DECLARE fib2 INT DEFAULT 1;
  ->   DECLARE fib3 INT DEFAULT 0;
  ->   DECLARE str VARCHAR(255) DEFAULT '01';
  ->
  ->   IF num = 1 THEN
  ->     RETURN fib1;
  ->   ELSEIF num = 2 THEN
  ->     RETURN CONCAT(fib1, fib2);
  ->   ELSE
  ->     WHILE num > 2 DO
  ->       SET fib3 = fib1 + fib2;
  ->       SET fib1 = fib2;
  ->       SET fib2 = fib3;
  ->       SET num = num - 1;
  ->       SET str = CONCAT(str, fib3);
  ->     END WHILE;
  ->     RETURN str;
  ->   END IF;
  -> END $$
```

Query OK, 0 rows affected (0.02 sec)

```
mysql> DELIMITER ;
mysql> call fibonacci(10)
  -> ;
ERROR 1305 (42000): PROCEDURE plsql1.fibonacci does not exist
mysql> select fibonacci(6);
+-----+
| fibonacci(6) |
+-----+
|      11235 |
+-----+
```

1 row in set (0.01 sec)

q4

```
create table customer (id int ,salary int);
insert into customer values (1,60000),(2,30000),(3,50000);
```

```
mysql> CREATE FUNCTION g()
-> returns int
-> DETERMINISTIC
-> BEGIN
-> declare i int ;
-> select count(*) into i from customer where salary > 40000;
-> return i;
-> END $$
```

Query OK, 0 rows affected (0.01 sec)

```
mysql> delimiter ;
mysql> select g();
```

```
+-----+
| g() |
+-----+
| 2 |
+-----+
```

1 row in set (0.01 sec)