Lab07 – Stored Procedures

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Query 1

```
mysql> delimiter //
mysql> create procedure insertIntoBank()
    -> begin
    -> insert into bank values('User','Sricity','M');
    -> end //
Query OK, 0 rows affected (0.02 sec)

mysql> delimiter ;
mysql> select * from bank;
Empty set (0.01 sec)

mysql> call insertIntoBank ;
Query OK, 1 row affected (0.01 sec)

mysql> select * from bank;
+------+-------------+------+
| name | branch_name | sex  |
+------+-------------+------+
| User | Sricity     | M    |
+------+-------------+------+
1 row in set (0.00 sec)
```

Query 2

```
mysql> drop procedure insertIntoBank ;
Query OK, 0 rows affected (0.01 sec)
```

Query 3

```
mysql> create procedure addTwoNums(in a int, in b int, out sum int)
    -> begin
    -> set sum = a = b;
    -> set sum = a+b;
    -> end //
Query OK, 0 rows affected (0.01 sec)
```

a = b was a mistake*

```
mysql> call addTwoNums(3, 4, @a);
Query OK, 0 rows affected (0.00 sec)

mysql> select @a;
+------+
| @a   |
+------+
|    7 |
+------+
1 row in set (0.00 sec)
```

Query 4

```
mysql> create procedure sqroot(inout num int)
    -> begin
    -> set num = SQRT(num);
    -> end //
Query OK, 0 rows affected (0.03 sec)
```

```
mysql> call sqroot(@a);
Query OK, 0 rows affected (0.00 sec)

mysql> select @a;
+------+
| @a   |
+------+
|    5 |
+------+
1 row in set (0.00 sec)
```

Query 5

```
mysql> delimiter //
mysql> create procedure countChars(in string varchar(20), out ans int)
    -> begin
    -> set ans = char_length(string);
    -> end //
Query OK, 0 rows affected (0.01 sec)

mysql> delimiter ;
mysql> set uwu = 'hello';
ERROR 1193 (HY000): Unknown system variable 'uwu'
mysql> set @uwu = 'hello';
Query OK, 0 rows affected (0.00 sec)

mysql> call countChars(@uwu, @a);
Query OK, 0 rows affected (0.00 sec)

mysql> select @a;
+------+
| @a   |
+------+
|    5 |
+------+
1 row in set (0.00 sec)
```

Query 6

```
mysql> create procedure factorial(in num int)
    -> begin
    -> declare ans int;
    -> set ans = 1;
    -> loop_label: LOOP
    -> if num = 0 or num = 1 then leave loop_label;
    -> end if;
    -> set ans = ans * num;
    -> set num = num - 1;
    -> iterate loop_label;
    -> end loop;
    -> set @aay = ans;
    -> select @aay;
    -> end //
Query OK, 0 rows affected (0.01 sec)

mysql> delimiter ;
mysql> call factorial(5);
+------+
| @aay |
+------+
|  120 |
+------+
1 row in set (0.00 sec)

Query OK, 0 rows affected (0.00 sec)
```

Query 7

```
mysql> delimiter //
mysql> create procedure updateTable(in string1 varchar(30), in string2 varchar(30))
    -> begin
    -> update bank
    -> set name = string2
    -> where name = string1;
    -> end //
Query OK, 0 rows affected (0.01 sec)

mysql> delimiter ;
mysql> call updateTable('User','User1') ;
Query OK, 1 row affected (0.01 sec)

mysql> select * from bank;
+-------+-------------+------+
| name  | branch_name | sex  |
+-------+-------------+------+
| User1 | Sricity     | M    |
+-------+-------------+------+
1 row in set (0.00 sec)
```

Query 8

```
mysql> delimiter //
mysql> create procedure id_check(in id varchar(4))
    -> begin
    -> select * from loan l where l.id = id;
    -> end //
Query OK, 0 rows affected (0.01 sec)

mysql> delimiter ;
mysql> call id_check('1010');
+------+-------+
| id   | name  |
+------+-------+
| 1010 | rossi |
+------+-------+
1 row in set (0.00 sec)

Query OK, 0 rows affected (0.01 sec)
```

Query 10

```
mysql> create procedure checkGreater(in bal int)
    -> begin
mysql> call checkGreater(5000) ;
+------+
| id   |
+------+
| 1010 |
| 1011 |
| 1013 |
+------+
3 rows in set (0.00 sec)
```

Thank you