Assignment 9

- **Create Simple Procedures**

```
mysql> CREATE PROCEDURE PRINT()
    -> BEGIN
    -> SELECT 'HELLO' AS OUTPUT;
    -> END;
    -> $
Query OK, 0 rows affected (0.06 sec)

mysql> CALL PRINT();
    -> $
+--------+
| OUTPUT |
+--------+
| HELLO  |
+--------+
1 row in set (0.00 sec)

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

```
mysql> CREATE TABLE STUDENT(ROLL_NO INT PRIMARY KEY, NAME VARCHAR(20), CLASS
VARCHAR(20), MARKS INT);
Query OK, 0 rows affected (0.33 sec)

mysql> INSERT INTO STUDENT VALUES (1, 'Shreyas Patil',null,900),(2,'Piyush
Rajput',null,1001),(3,'Jagruti Patil',null,600),(4,'Manisha
Yemul',null,800),(5,'Aditya Pandit',null,200),(6,'Harsh',null,50);
Query OK, 6 rows affected (0.07 sec)
Records: 6  Duplicates: 0  Warnings: 0

mysql> SELECT * FROM STUDENT;
+---------+---------------+-------+-------+
| ROLL_NO | NAME          | CLASS | MARKS |
+---------+---------------+-------+-------+
|       1 | Shreyas Patil | NULL  |   900 |
|       2 | Piyush Rajput | NULL  |  1001 |
|       3 | Jagruti Patil | NULL  |   600 |
|       4 | Manisha Yemul | NULL  |   800 |
|       5 | Aditya Pandit | NULL  |   200 |
|       6 | Harsh         | NULL  |    50 |
+---------+---------------+-------+-------+
6 rows in set (0.00 sec)
```

- **Set Delimiter:**

```
mysql> DELIMITER $
```

- **Create Procedure to Show Data**

```
mysql> CREATE PROCEDURE GETDATA(IN ID INT)
    -> BEGIN
    -> SELECT * FROM STUDENT WHERE ROLL_NO=ID;
    -> END;
    -> $
Query OK, 0 rows affected (0.08 sec)
```

- **Create procedure to get the value**

```
mysql> CREATE PROCEDURE GETSAL(IN CID INT, OUT SALARY FLOAT)
    -> BEGIN
    -> SELECT CUST_SALARY INTO SALARY FROM CUSTOMER WHERE CUST_ID = CID;
    -> END;
    -> $
```

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

mysql> SELECT * FROM CUSTOMER;
    -> $
+---------+---------------+-------------+------------+---------------+---------+
| CUST_ID | CUST_NAME     | CUST_SALARY | CONTACT    | CITY          | COUNTRY |
+---------+---------------+-------------+------------+---------------+---------+
|       1 | PIYUSH RAJPUT |       50000 | 8877665544 | PUNE          | INDIA   |
|       2 | SHREYAS PATIL |      500000 | 8873475544 | JALGAON       | INDIA   |
|       3 | HARRY POTTER  |     5000000 | 9073475544 | SAN FRANSISCO | US      |
+---------+---------------+-------------+------------+---------------+---------+
3 rows in set (0.02 sec)

mysql> CALL GETSAL(1, @SAL)$
Query OK, 1 row affected (0.00 sec)

mysql> SELECT @SAL$
+-------+
| @SAL  |
+-------+
| 50000 |
+-------+
1 row in set (0.00 sec)
```

- **Create procedure to Update the data.**

```
mysql> CREATE PROCEDURE UPDATECLASS()
    -> BEGIN
    -> UPDATE STUDENT SET CLASS = 'DISTINCTION' WHERE MARKS<=1500 AND MARKS>=990;
    -> UPDATE STUDENT SET CLASS = 'FIRST CLASS' WHERE MARKS<=989 AND MARKS>=900;
    -> UPDATE STUDENT SET CLASS = 'SECOND CLASS' WHERE MARKS<=899 AND MARKS>=825;
    -> UPDATE STUDENT SET CLASS = 'POOR' WHERE MARKS<=824;
    -> END;
    -> $
Query OK, 0 rows affected (0.00 sec)
mysql> CREATE PROCEDURE ASSTATUS()
    -> BEGIN
    -> UPDATE CUSTOMER SET STATUS = 'Platinum' WHERE SALARY > 75000;
    -> UPDATE CUSTOMER SET STATUS = 'Gold' WHERE SALARY > 45000 AND SALARY < 75000;
    -> UPDATE CUSTOMER SET STATUS = 'Silver' WHERE SALARY < 45000;
    -> END;
    -> $
Query OK, 0 rows affected (0.00 sec)

mysql> CALL ASSTATUS()$
Query OK, 1 row affected (0.19 sec)

mysql> SELECT * FROM CUSTOMER$
+------+---------+--------+----------+
| ID   | NAME    | SALARY | STATUS   |
+------+---------+--------+----------+
|    1 | Shreyas |  50000 | Gold     |
|    2 | Piyush  |  50000 | Gold     |
|    3 | Aditya  |  90000 | Platinum |
|    4 | Harsh   |  10000 | Silver   |
+------+---------+--------+----------+
4 rows in set (0.00 sec)
```

- **Call Procedures**

```
mysql> CALL UPDATECLASS()$
Query OK, 4 rows affected (0.14 sec)

mysql> SELECT * FROM STUDENT$
```

```
+---------+---------------+-------------+-------+
| ROLL_NO | NAME          | CLASS       | MARKS |
+---------+---------------+-------------+-------+
|       1 | Shreyas Patil | FIRST CLASS |   900 |
|       2 | Piyush Rajput | DISTINCTION |  1001 |
|       3 | Jagruti Patil | POOR        |   600 |
|       4 | Manisha Yemul | POOR        |   800 |
|       5 | Aditya Pandit | POOR        |   200 |
|       6 | Harsh         | POOR        |    50 |
+---------+---------------+-------------+-------+
6 rows in set (0.00 sec)


mysql> CALL GETDATA(1)$
+---------+---------------+-------------+-------+
| ROLL_NO | NAME          | CLASS       | MARKS |
+---------+---------------+-------------+-------+
|       1 | Shreyas Patil | FIRST CLASS |   900 |
+---------+---------------+-------------+-------+
1 row in set (0.00 sec)
```

- **Create and call functions:**

```
mysql> CREATE FUNCTION calcProfit(cost FLOAT, price FLOAT) RETURNS DECIMAL(9,2)
    -> BEGIN
    ->   DECLARE profit DECIMAL(9,2);
    ->   SET profit = price-cost;
    ->   RETURN profit;
    -> END$$
Query OK, 0 rows affected (0.00 sec)

mysql> SELECT *, calcProfit(prod_cost,prod_price) AS profit FROM products$
+---------+--------------+-----------+------------+--------+
| prod_id | prod_name    | prod_cost | prod_price | profit |
+---------+--------------+-----------+------------+--------+
|       1 | Basic Widget |      5.95 |       8.35 |   2.40 |
|       2 | Micro Widget |      0.95 |       1.35 |   0.40 |
|       3 | Mega Widget  |     99.95 |        140 |  40.05 |
+---------+--------------+-----------+------------+--------+
3 rows in set (0.02 sec)
```

- **Show List of Procedures of Specific Database:**

```
MySQL> SHOW PROCEDURE STATUS WHERE DB = 'SHREYAS'$

+---------+-------------+-----------+----------------+---------------------+------------------
---+---------------+---------+----------------------+----------------------+------------------
--+

| Db      | Name        | Type      | Definer        | Modified            | Created
| Security_type | Comment | character_set_client | collation_connection | Database Collation |

+---------+-------------+-----------+----------------+---------------------+------------------
---+---------------+---------+----------------------+----------------------+------------------
--+

| college | ASSTATUS    | PROCEDURE | root@localhost | 2019-08-26 11:44:34 | 2019-08-26
11:44:34 | DEFINER       |         | latin1               | latin1_swedish_ci    |
latin1_swedish_ci  |

| college | GETDATA     | PROCEDURE | root@localhost | 2019-08-26 11:44:18 | 2019-08-26
11:44:18 | DEFINER       |         | latin1               | latin1_swedish_ci    |
latin1_swedish_ci  |
```

```
| college | GETSAL      | PROCEDURE | root@localhost | 2019-08-26 11:44:04 | 2019-08-26
11:44:04 | DEFINER       |          | latin1               | latin1_swedish_ci    |
latin1_swedish_ci  |

| college | UPDATECLASS | PROCEDURE | root@localhost | 2019-08-26 11:44:40 | 2019-08-26
11:44:40 | DEFINER       |          | latin1               | latin1_swedish_ci    |
latin1_swedish_ci  |

| college | UPDATESAL   | PROCEDURE | root@localhost | 2019-08-26 11:43:37 | 2019-08-26
11:43:37 | DEFINER       |          | latin1               | latin1_swedish_ci    |
latin1_swedish_ci  |

+---------+-------------+-----------+----------------+---------------------+------------------
---+---------------+---------+----------------------+----------------------+------------------
--+

5 rows in set (0.152 sec)
```