Practical No:05

```
mysql> CREATE DATABASE class;
Query OK, 1 row affected (0.01 sec)

mysql> USE class;
Database changed

mysql> CREATE TABLE O_RollCall (
   -> roll_no INT(3),
   -> name VARCHAR(20)
   -> );
Query OK, 0 rows affected (0.02 sec)

mysql> CREATE TABLE N_RollCall (
   -> roll_no INT(3),
   -> name VARCHAR(20)
   -> );
Query OK, 0 rows affected (0.01 sec)

mysql> INSERT INTO O_RollCall VALUES (1, 'Avi');
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO O_RollCall VALUES (2, 'Ram');
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO O_RollCall VALUES (3, 'Soham');
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO O_RollCall VALUES (5, 'Mohan');
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO O_RollCall VALUES (6, 'Om');
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO O_RollCall VALUES (9, 'Yash');
Query OK, 1 row affected (0.01 sec)

mysql> INSERT INTO O_RollCall VALUES (11, 'Mayur');
Query OK, 1 row affected (0.01 sec)

mysql> SELECT * FROM O_RollCall;
+---------+----------+
| roll_no | name     |
+---------+----------+
|       1 | Avi      |
|       2 | Ram      |
```

```
|      3 | Soham    |
|      5 | Mohan    |
|      6 | Om       |
|      9 | Yash     |
|     11 | Mayur    |
+--------+----------+
7 rows in set (0.00 sec)

mysql> SELECT * FROM N_RollCall;
Empty set (0.00 sec)

mysql> DELIMITER //

mysql> CREATE PROCEDURE cursor_proc_p1()
   -> BEGIN
   ->    DECLARE fin INTEGER DEFAULT 0;
   ->    DECLARE old_roll INT(3);
   ->    DECLARE old_name VARCHAR(20);
   ->    DECLARE new_roll INT(3);
   ->    DECLARE old_csr CURSOR FOR SELECT roll_no, name FROM O_RollCall;
   ->    DECLARE new_csr CURSOR FOR SELECT roll_no FROM N_RollCall;
   ->    DECLARE CONTINUE HANDLER FOR NOT FOUND SET fin=1;
   ->
   ->    OPEN old_csr;
   ->    OPEN new_csr;
   ->
   ->    ss: LOOP
   ->       FETCH old_csr INTO old_roll, old_name;
   ->       FETCH new_csr INTO new_roll;
   ->
   ->       IF fin=1 THEN
   ->          LEAVE ss;
   ->       END IF;
   ->
   ->       IF old_roll <> new_roll THEN
   ->          INSERT INTO N_RollCall VALUES(old_roll, old_name);
   ->       END IF;
   ->    END LOOP;
   ->
   ->    CLOSE old_csr;
   ->    CLOSE new_csr;
   -> END //
Query OK, 0 rows affected (0.04 sec)

mysql> DELIMITER ;
```

```
mysql> DELIMITER //

mysql> CREATE PROCEDURE cursor_proc_p2(IN r1 INT)
   -> BEGIN
   ->    DECLARE r2 INT;
   ->    DECLARE exit_loop BOOLEAN DEFAULT FALSE;
   ->    DECLARE c1 CURSOR FOR SELECT roll_no FROM O_RollCall WHERE
roll_no > r1;
   ->    DECLARE CONTINUE HANDLER FOR NOT FOUND SET exit_loop=TRUE;
   ->
   ->    OPEN c1;
   ->
   ->    e_loop: LOOP
   ->       FETCH c1 INTO r2;
   ->
   ->       IF NOT EXISTS(SELECT * FROM N_RollCall WHERE roll_no = r2) THEN
   ->          INSERT INTO N_RollCall SELECT * FROM O_RollCall WHERE roll_no =
r2;
   ->       END IF;
   ->
   ->       IF exit_loop THEN
   ->          CLOSE c1;
   ->          LEAVE e_loop;
   ->       END IF;
   ->    END LOOP e_loop;
   -> END //
Query OK, 0 rows affected (0.03 sec)

mysql> DELIMITER ;

mysql> CALL cursor_proc_p2(5);
Query OK, 0 rows affected (0.02 sec)

mysql> SELECT * FROM O_RollCall;
+---------+----------+
| roll_no | name     |
+---------+----------+
|       1 | Avi      |
|       2 | Ram      |
|       3 | Soham    |
|       5 | Mohan    |
|       6 | Om       |
|       9 | Yash     |
|      11 | Mayur    |
+---------+----------+
7 rows in set (0.00 sec)
```

mysql> SELECT * FROM N_RollCall;

```
+---------+----------+
| roll_no | name     |
+---------+----------+
|       6 | Om       |
|       9 | Yash     |
|      11 | Mayur    |
+---------+----------+
```

3 rows in set (0.00 sec)

mysql> CALL cursor_proc_p2(3);

Query OK, 0 rows affected (0.02 sec)

mysql> CALL cursor_proc_p1();

Query OK, 0 rows affected (0.03 sec)

mysql> SELECT * FROM O_RollCall;

```
+---------+----------+
| roll_no | name     |
+---------+----------+
|       1 | Avi |
|       2 | Ram      |
|       3 | Soham    |
|       5 | Mohan    |
|       6 | Om       |
|       9 | Yash     |
|      11 | Mayur    |
+---------+----------+
```

7 rows in set (0.00 sec)

mysql> SELECT * FROM N_RollCall;

```
+---------+----------+
| roll_no | name     |
+---------+----------+
|       6 | Om       |
|       9 | Yash     |
|      11 | Mayur    |
|       1 | Avi |
|       2 | Ram      |
|       3 | Soham    |
|       5 | Mohan    |
+---------+----------+
```

7 rows in set (0.00 sec)