

AIM: Cursors :(All types: Implicit, Explicit, Cursor FOR Loop, Parameterized Cursor)

Problem Statement: Write a PL/SQL block of code using parameterized Cursor that will merge the data available in the newly created table N_Roll Call with the data available in the table O_RollCall. If the data in the first table already exist in the second table then that data should be skipped. Note: Instructor will frame the problem statement for writing PL/SQL block using all types of Cursors in line with above statement.

TABLES

```
mysql> SHOW TABLES;
```

```
+-----+
| Tables_in_cursor_database |
+-----+
| N_RollCall                |
| O_RollCall                |
+-----+
2 rows in set (0.00 sec)
```

```
mysql> SELECT * FROM N_RollCall;
```

```
+-----+-----+
| Roll_no | Name  |
+-----+-----+
|        1 | Tejas |
|        2 | Sujal |
|        5 | Hitesh |
+-----+-----+
3 rows in set (0.00 sec)
```

```
mysql> SELECT * FROM O_RollCall;
```

```
+-----+-----+
| Roll_no | Name  |
+-----+-----+
|        1 | Rohan |
|        2 | Sujal |
|        3 | Sumit |
+-----+-----+
3 rows in set (0.00 sec)
```

PROCEDURE & CALL

```
mysql> DELIMITER $$
mysql>
mysql> CREATE PROCEDURE merge_rollcall_data()
  → BEGIN
  → DECLARE v_rollno INT;
  → DECLARE v_name VARCHAR(20);
  → DECLARE done INT DEFAULT 0;
  →
  → DECLARE cur CURSOR FOR
  →   SELECT Roll_no FROM N_RollCall;
  →
  → DECLARE CONTINUE HANDLER FOR NOT FOUND SET done = 1;
  →
  → OPEN cur;
  →
  → read_loop: LOOP
  →   FETCH cur INTO v_rollno;
  →   IF done = 1 THEN
  →     LEAVE read_loop;
  →   END IF;
  →
  → IF(SELECT COUNT(*) FROM O_RollCall WHERE Roll_no=v_rollno)=0
  →   THEN
  →     SELECT Name
  →     INTO v_name
  →     FROM N_RollCall
  →     WHERE Roll_no = v_rollno;
  →
  →     INSERT INTO O_RollCall(Roll_no,Name)
  →     VALUES (v_rollno,v_name);
  →   END IF;
  → END LOOP;
  → CLOSE cur;
  → END$$
```

Query OK, 0 rows affected (0.07 sec)

```
mysql> DELIMITER ;
mysql> CALL merge_rollcall_data();
Query OK, 0 rows affected (0.02 sec)
```

OUTPUT

```
mysql> SELECT * FROM O_RollCall;
+-----+-----+
| Roll_no | Name  |
+-----+-----+
|      1  | Rohan |
|      2  | Sujal |
|      3  | Sumit |
|      5  | Hitesh |
+-----+-----+
4 rows in set (0.00 sec)
```