

Output: Cursor Example

```
Command Prompt - mysql -u root -p
mysql> use A6;
Database changed
mysql>
mysql> create table stud_marks(
  ->     roll_no int PRIMARY KEY,
  ->     name varchar(50),
  ->     marks int
  -> );
Query OK, 0 rows affected (0.03 sec)

mysql>
mysql> insert into stud_marks(roll_no,name,marks) values
  ->     (1,'Amit',1450),
  ->     (2,'Beena',980),
  ->     (3,'Chetan',920);
Query OK, 3 rows affected (0.01 sec)
Records: 3  Duplicates: 0  Warnings: 0

mysql>
mysql> select * from stud_marks;
+-----+-----+-----+
| roll_no | name  | marks |
+-----+-----+-----+
|      1 | Amit  | 1450  |
|      2 | Beena | 980   |
|      3 | Chetan | 920   |
+-----+-----+-----+
3 rows in set (0.00 sec)
```

```
Select Command Prompt - mysql -u root -p
mysql> delimiter //
mysql> create procedure list_of_students()
  -> begin
  ->     declare v_roll int;
  ->     declare v_name varchar(100);
  ->     declare v_marks int;
  ->     declare done int default 0;
  ->     declare cur_stud cursor for
  ->         select roll_no,name,marks from stud_marks;
  ->     declare continue handler for not found
  ->         set done = 1;
  ->
  ->     open cur_stud;
  ->
  ->     read_loop: loop
  ->         fetch cur_stud into v_roll,v_name,v_marks;
  ->         if done=1 then
  ->             leave read_loop;
  ->         end if;
  ->         select v_roll ,v_name,v_marks;
  ->     end loop;
  ->
  ->     close cur_stud;
  -> end;
  -> //
Query OK, 0 rows affected (0.00 sec)

mysql> delimiter ;
mysql>
```

```
mysql> call list_of_students();
+-----+-----+-----+
| v_roll | v_name | v_marks |
+-----+-----+-----+
|      1 | Amit  | 1450  |
+-----+-----+-----+
1 row in set (0.00 sec)

+-----+-----+-----+
| v_roll | v_name | v_marks |
+-----+-----+-----+
|      2 | Beena | 980   |
+-----+-----+-----+
1 row in set (0.01 sec)

+-----+-----+-----+
| v_roll | v_name | v_marks |
+-----+-----+-----+
|      3 | Chetan | 920   |
+-----+-----+-----+
1 row in set (0.02 sec)

Query OK, 0 rows affected (0.03 sec)
```

A6:

```
Select Command Prompt - mysql -u root -p
mysql> create table N_RollCall(
  ->     student_id int,
  ->     class_date DATE,
  ->     status varchar(10)
  -> );
Query OK, 0 rows affected (0.02 sec)

mysql>
mysql> create table O_RollCall(
  ->     student_id int,
  ->     class_date DATE,
  ->     status varchar(10),
  ->     PRIMARY KEY (student_id,class_date)
  -> );
Query OK, 0 rows affected (0.02 sec)

mysql>
mysql> insert into N_RollCall(student_id,class_date,status) values
  ->     (107,'2025-09-01','Present');
Query OK, 1 row affected (0.00 sec)

mysql>
mysql> insert into O_RollCall(student_id,class_date,status) values
  ->     (101,'2025-09-01','Present'),
  ->     (102,'2025-09-01','Absent'),
  ->     (103,'2025-09-01','Present');
Query OK, 3 rows affected (0.00 sec)
Records: 3  Duplicates: 0  Warnings: 0

mysql>
mysql> insert into N_RollCall (student_id,class_date,status) values
  ->     (101,'2025-09-01','Present'),
  ->     (102,'2025-09-02','Present'),
  ->     (104,'2025-09-01','Absent'),
  ->     (105,'2025-09-03','Present');
Query OK, 4 rows affected (0.00 sec)
Records: 4  Duplicates: 0  Warnings: 0
```

```
mysql>
mysql> select * from N_RollCall;
+-----+-----+-----+
| student_id | class_date | status |
+-----+-----+-----+
|          107 | 2025-09-01 | Present |
|          101 | 2025-09-01 | Present |
|          102 | 2025-09-02 | Present |
|          104 | 2025-09-01 | Absent |
|          105 | 2025-09-03 | Present |
+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> select * from O_RollCall;
+-----+-----+-----+
| student_id | class_date | status |
+-----+-----+-----+
|          101 | 2025-09-01 | Present |
|          102 | 2025-09-01 | Absent |
|          103 | 2025-09-01 | Present |
+-----+-----+-----+
3 rows in set (0.00 sec)
```

```
Select Command Prompt - mysql -u root -p

mysql>
mysql> delimiter //
mysql> create procedure MergeRollCall2(in p_student_id int)
-> begin
->     declare done int default false;
->     declare v_student_id int;
->     declare v_class_date DATE;
->     declare v_status varchar(10);
->     declare cur cursor for select student_id,class_date,status from N_RollCall where student_id = p_student_id;
->     declare continue handler for not found set done = true;
->
->     open cur;
->
->     read_loop: loop
->         fetch cur into v_student_id,v_class_date,v_status;
->         if done then
->             leave read_loop;
->         end if;
->
->         insert into O_RollCall(student_id,class_date,status)
->         select v_student_id,v_class_date,v_status
->         where not exists(
->             select 1 from O_RollCall
->             where student_id = v_student_id AND class_date = v_class_date
->         );
->     end loop;
->
->     close cur;
-> end;
-> //
Query OK, 0 rows affected (0.00 sec)

mysql> delimiter ;
mysql>
mysql> call MergeRollCall2(107);
Query OK, 0 rows affected (0.00 sec)
```

```
mysql> select * from O_RollCall;
+-----+-----+-----+
| student_id | class_date | status |
+-----+-----+-----+
| 101 | 2025-09-01 | Present |
| 102 | 2025-09-01 | Absent |
| 103 | 2025-09-01 | Present |
| 107 | 2025-09-01 | Present |
+-----+-----+-----+
4 rows in set (0.00 sec)

mysql> select * from N_RollCall;
+-----+-----+-----+
| student_id | class_date | status |
+-----+-----+-----+
| 107 | 2025-09-01 | Present |
| 101 | 2025-09-01 | Present |
| 102 | 2025-09-02 | Present |
| 104 | 2025-09-01 | Absent |
| 105 | 2025-09-03 | Present |
+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> █
```