

# DBMSL Practical Exam

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Aim: Cursor Implementation

Problem Statement:

Write a PL/SQL block of code using cursor, that will merge the data available in newly created table n\_emp with the data available in the table o\_emp if data in the first table already exist in the second table then the data should be skipped.

1. Creation of database, along with o\_emp and n\_emp tables. Also inserting data in o\_emp table.

```
MySQL 8.0 Command Line Client
mysql> use prac;
Database changed
mysql> create table o_emp(empid int, empname varchar(25), empsal int, deptid int, deptname varchar(25), primary key(empid));
Query OK, 0 rows affected (37.47 sec)

mysql> insert into o_emp values(1, 'Rutuja',10000,100,'IT'),(2,'Aashita',10000,100,'IT'),(3,'Sanskriti',30000,200,'Finance'),(4,'Siddhi',25000,300,'Sales');
Query OK, 4 rows affected (4.38 sec)
Records: 4 Duplicates: 0 Warnings: 0

mysql> create table n_emp(empid int,empname varchar(25),empsal int,deptid int,deptname varchar(25), primary key(empid));
Query OK, 0 rows affected (14.11 sec)

mysql> select * from o_emp;
+-----+-----+-----+-----+-----+
| empid | empname | empsal | deptid | deptname |
+-----+-----+-----+-----+-----+
| 1 | Rutuja | 10000 | 100 | IT |
| 2 | Aashita | 10000 | 100 | IT |
| 3 | Sanskriti | 30000 | 200 | Finance |
| 4 | Siddhi | 25000 | 300 | Sales |
+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)

mysql> select * from n_emp;
Empty set (0.00 sec)
```

Activate Windows  
Go to Settings to activate Windows.

## 2. Creating procedure clone() for cursor implementation and calling procedure clone().

```
MySQL 8.0 Command Line Client
mysql> delimiter //
mysql> create procedure clone()
-> begin
-> declare eid int;
-> declare ename varchar(25);
-> declare esal int;
-> declare did int;
-> declare dname varchar(25);
-> declare exit_loop boolean;
-> declare c1 cursor for select * from o_emp;
-> declare continue handler for not found set exit_loop = true;
-> open c1;
-> m1:loop
-> fetch c1 into eid,ename,esal,did,dname;
-> if not exists(select * from n_emp where empid=eid) then
-> insert into n_emp values(eid,ename,esal,did,dname);
-> end if;
-> if exit_loop then
-> close c1;
-> leave m1;
-> end if;
-> end loop m1;
-> end
-> //
Query OK, 0 rows affected (6.45 sec)

mysql> delimiter ;
mysql> call clone();
Query OK, 0 rows affected (3.15 sec)
```

## 3. Results after calling procedure clone().

```
MySQL 8.0 Command Line Client
mysql> select * from o_emp;
+-----+-----+-----+-----+-----+
| empid | empname | empsal | deptid | deptname |
+-----+-----+-----+-----+-----+
| 1 | Rutuja | 10000 | 100 | IT |
| 2 | Aashita | 10000 | 100 | IT |
| 3 | Sanskruti | 30000 | 200 | Finance |
| 4 | Siddhi | 25000 | 300 | Sales |
+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)

mysql> select * from n_emp;
+-----+-----+-----+-----+-----+
| empid | empname | empsal | deptid | deptname |
+-----+-----+-----+-----+-----+
| 1 | Rutuja | 10000 | 100 | IT |
| 2 | Aashita | 10000 | 100 | IT |
| 3 | Sanskruti | 30000 | 200 | Finance |
| 4 | Siddhi | 25000 | 300 | Sales |
+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)
```

## 4. Again calling procedure clone() to check duplication can be avoided or not.

```
MySQL 8.0 Command Line Client
mysql> call clone();
Query OK, 0 rows affected (0.00 sec)

mysql> select * from n_emp;
+-----+-----+-----+-----+-----+
| empid | empname | empsal | deptid | deptname |
+-----+-----+-----+-----+-----+
| 1 | Rutuja | 10000 | 100 | IT |
| 2 | Aashita | 10000 | 100 | IT |
| 3 | Sanskruti | 30000 | 200 | Finance |
| 4 | Siddhi | 25000 | 300 | Sales |
+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)
```