

Ex:No: 12

Date:

## TCL COMMANDS

### Aim:

To learn how to use various TCL commands Commit, Rollback and Savepoint SQL commands

### Syntax:

```
ROLLBACK TO savepoint_name;
```

SAVEPOINT command

SAVEPOINT command is used to temporarily save a transaction so that you can rollback to that point whenever required.

### Syntax:

```
SAVEPOINT savepoint_name\|;
```

### Problem 1:

Rollback to that state using the ROLLBACK command whenever required.

Create a following table Class and insert values into it in the order and create savepoints in between them. Try to rollback to the save point and check your output by giving select commands.

Let us use some SQL queries on the above table and see the results.

```
INSERT INTO class VALUES(5,'Rahul');
```

```
COMMIT;
```

```
UPDATE class SET name ='Abhijit' WHERE id ='5';
```

```
SAVEPOINT A;
```

```
INSERT INTO class VALUES(6,'Chris');
```

```
SAVEPOINT B;
```

```
SAVEPOINT C;
```

The resultant table will look like,

Now let's use the ROLLBACK command to roll back the state of data to the savepoint B.

```
ROLLBACKTO B;
```

```
SELECT*FROM class;
```

Now our class table will look like,

Now let's again use the ROLLBACK command to roll back the state of data to the savepoint A

```
ROLLBACKTO A;
```

```
SELECT*FROM class;
```

Now the table will look like,

## Queries:

```
mysql> create table class(name varchar(10),id int(5));
Query OK, 0 rows affected (0.19 sec)

mysql> insert into class values("dj",5);
Query OK, 1 row affected (0.00 sec)

mysql> commit;
Query OK, 0 rows affected (0.04 sec)

mysql> update class set name="bravo" where id="5";
Query OK, 0 rows affected (0.00 sec)
Rows matched: 0  Changed: 0  Warnings: 0

mysql> savepoint A;
Query OK, 0 rows affected (0.00 sec)

mysql> insert into class values("uppal",6);
Query OK, 1 row affected (0.00 sec)

mysql> savepoint B;
Query OK, 0 rows affected (0.00 sec)

mysql> insert into class values("balu",7);
Query OK, 1 row affected (0.00 sec)

mysql> savepoint C;
Query OK, 0 rows affected (0.00 sec)

mysql> select * from class;
+-----+
| name | id |
+-----+
| dj   | 5 |
| uppal | 6 |
| balu | 7 |
+-----+
3 rows in set (0.00 sec)

mysql> ROLLBACK TO B;
Query OK, 0 rows affected (0.00 sec)

mysql> select * from class;
+-----+
| name | id |
+-----+
| dj   | 5 |
| uppal | 6 |
+-----+
2 rows in set (0.00 sec)

mysql> ROLLBACK TO A;
Query OK, 0 rows affected (0.00 sec)

mysql> select * from class;
+-----+
| name | id |
+-----+
| dj   | 5 |
+-----+
1 row in set (0.00 sec)
```

## Result:

So now we know how the commands COMMIT, ROLLBACK and SAVEPOINT works.