

ASSIGNMENT NO : 08 (A)

Name : Ronak Sanjay Rahane

Roll No : 26

Batch : TE - B2

PROBLEM STATEMENT :

Database Trigger (All Types: Row level and Statement level triggers, Before and After Triggers). Write a database trigger on Library table. The System should keep track of the records that are being updated or deleted. The old value of updated or deleted records should be added in Library_Audit table.

Output :

```
gescoe@gescoe-OptiPlex-3010:~$ mysql -h 192.168.2.232 -u TEB26 -p
Enter password:
ERROR 1045 (28000): Access denied for user 'TEB26'@'192.168.2.224' (using password: YES)
gescoe@gescoe-OptiPlex-3010:~$ mysql -h 192.168.2.232 -u TEB26 -p
Enter password:
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 50
Server version: 5.6.41 MySQL Community Server (GPL)
```

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Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

```
mysql> CREATE DATABASE TEB_26;
Query OK, 1 row affected (0.00 sec)
```

```
mysql> USE TEB_26;
Database changed
mysql> CREATE TABLE lib_Audit(bid int,bname varchar(20),qty int);
Query OK, 0 rows affected (0.30 sec)
```

```
mysql> CREATE TABLE lib_book(bid int,bname varchar(20),qty int);
Query OK, 0 rows affected (0.42 sec)
```

```
mysql> INSERT INTO lib_book values(1,'DBMS',100);
```

Query OK, 1 row affected (0.04 sec)

```
mysql> INSERT INTO lib_book values(1,'SPOS',90);
```

Query OK, 1 row affected (0.05 sec)

```
mysql> INSERT INTO lib_book values(1,'TOC',110);
```

Query OK, 1 row affected (0.06 sec)

```
mysql> INSERT INTO lib_book values(1,'SPM',130);
```

Query OK, 1 row affected (0.05 sec)

```
mysql> INSERT INTO lib_book values(1,'CSNL',50);
```

Query OK, 1 row affected (0.05 sec)

```
mysql> SELECT * FROM lib_book;
```

```
+-----+-----+-----+
| bid | bname | qty |
+-----+-----+-----+
| 1 | DBMS | 100 |
| 1 | SPOS | 90 |
| 1 | TOC | 110 |
| 1 | SPM | 130 |
| 1 | CSNL | 50 |
+-----+-----+-----+
```

5 rows in set (0.00 sec)

```
mysql> drop trigger if exists Make_audit1;
```

Query OK, 0 rows affected, 1 warning (0.00 sec)

```
mysql>
```

```
mysql> delimiter //
```

```
mysql>
```

```
mysql> CREATE TRIGGER Make_audit1
```

```
-> AFTER DELETE ON lib_book
```

```
-> FOR EACH ROW
```

```
-> BEGIN
```

```
-> INSERT INTO lib_Audit (bid, bname, qty)
```

```
-> VALUES (OLD.bid, OLD.bname,OLD.qty);
```

```
-> END;
```

```
-> //
```

Query OK, 0 rows affected (0.11 sec)

```
mysql>
```

```
mysql> delimiter ;
```

```
mysql> DELETE FROM lib_book WHERE bname='TOC';
Query OK, 1 row affected (0.05 sec)
```

```
mysql> SELECT * FROM lib_book;
```

bid	bname	qty
1	DBMS	100
1	SPOS	90
1	SPM	130
1	CSNL	50

```
4 rows in set (0.00 sec)
```

```
mysql> SELECT * FROM lib_Audit;
```

bid	bname	qty
1	TOC	110

```
1 row in set (0.00 sec)
```

```
mysql> drop trigger if exists Make_audit2;
Query OK, 0 rows affected, 1 warning (0.00 sec)
```

```
mysql>
```

```
mysql> delimiter //
```

```
mysql>
```

```
mysql> CREATE TRIGGER Make_audit2
```

```
-> AFTER UPDATE ON lib_book
```

```
-> FOR EACH ROW
```

```
-> BEGIN
```

```
-> INSERT INTO lib_Audit (bid, bname, qty)
```

```
-> VALUES (OLD.bid, OLD.bname,OLD.qty);
```

```
-> END;
```

```
-> //
```

```
Query OK, 0 rows affected (0.09 sec)
```

```
mysql> delimiter ;
```

```
mysql> UPDATE lib_book WHERE bname='SPOS'set qty = qty-20;
```

```
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'WHERE bname='SPOS'set qty = qty-20' at line 1
```

```
mysql> UPDATE lib_book WHERE bname='SPOS' = qty-20;
```

ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'WHERE bname='SPOS' = qty-20' at line 1
mysql> UPDATE lib_book WHERE set qty = qty-20;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'WHERE set qty = qty-20' at line 1
mysql> UPDATE lib_book set qty = qty-20;
Query OK, 4 rows affected (0.13 sec)
Rows matched: 4 Changed: 4 Warnings: 0

mysql> SELECT * FROM lib_book;

bid	bname	qty
1	DBMS	80
1	SPOS	70
1	SPM	110
1	CSNL	30

4 rows in set (0.00 sec)

mysql> SELECT * FROM lib_Audit;

bid	bname	qty
1	TOC	110
1	DBMS	100
1	SPOS	90
1	SPM	130
1	CSNL	50

5 rows in set (0.00 sec)

mysql>
