

ASSIGNMENT NO:8

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.

```
gescoe@gescoe-OptiPlex-3010:~$ mysql -h 192.168.2.232 -u TEB41 -p
```

Enter password:

Welcome to the MariaDB monitor. Commands end with ; or \g.

Your MySQL connection id is 54

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 [(none)]> use TEB_41;
```

Database changed

```
MySQL [TEB_41]> create table lib_Audit(bid int,bname varchar(20),qty int);
```

Query OK, 0 rows affected (0.482 sec)

```
MySQL [TEB_41]> create table lib_book(bid int,bname varchar(20),qty int);
```

Query OK, 0 rows affected (0.357 sec)

```
MySQL[TEB_41]>insert                                     into                                lib_book
values(1,'DBMS',25),(2,'CNS',47),(3,'TOC',10),(4,'SPOS',30);
```

Query OK, 4 rows affected (0.079 sec)

Records: 4 Duplicates: 0 Warnings: 0

```
MySQL [TEB_41]> select * from lib_book;
```

```
+-----+-----+-----+
```

```
| bid | bname | qty |
```

```
+-----+-----+-----+
```

```
|      1 | DBMS | 25 |
```

```
|      2 | CNS  | 47 |
```

```
|      3 | TOC  | 10 |
```

```
|      4 | SPOS | 30 |
```

```
+-----+-----+-----+
```

4 rows in set (0.001 sec)

```
MySQL [TEB_41]> select * from lib_Audit;
```

Empty set (0.001 sec)

```
MySQL [TEB_41]> drop trigger if exists Make_audit1;
Query OK, 0 rows affected, 1 warning (0.000 sec)
```

```
MySQL [TEB_41]> delimiter;
ERROR: DELIMITER must be followed by a 'delimiter' character or string
```

```
MySQL [TEB_41]> delimiter //
```

```
MySQL [TEB_41]> 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 (0.126 sec)
```

```
MySQL [TEB_41]> delimiter ;
```

```
MySQL [TEB_41]> delete from lib_book where bid=2;
```

```
Query OK, 1 row affected (0.043 sec)
```

```
MySQL [TEB_41]> select * from lib_book;
```

```
+-----+-----+-----+
| bid | bname | qty |
+-----+-----+-----+
|    1 | DBMS  | 25 |
|    3 | TOC   | 10 |
|    4 | SPOS  | 30 |
+-----+-----+-----+
```

```
3 rows in set (0.001 sec)
```

```
MySQL [TEB_41]> select * from lib_Audit;
```

```
+-----+-----+-----+
| bid | bname | qty |
+-----+-----+-----+
|    2 | CNS   | 47 |
+-----+-----+-----+
```

```
1 row in set (0.001 sec)
```

```
MySQL [TEB_41]> drop trigger if exists Make_audit2;
```

Query OK, 0 rows affected (0.040 sec)

MySQL [TEB_41]>

MySQL [TEB_41]> delimiter //

MySQL [TEB_41]>

MySQL [TEB_41]> 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 (0.073 sec)

MySQL [TEB_41]>

MySQL [TEB_41]> delimiter ;

MySQL [TEB_41]> update lib_book set bname='Gate' where bid=3;

Query OK, 1 row affected (0.057 sec)

Rows matched: 1 Changed: 1 Warnings: 0

MySQL [TEB_41]> select * from lib_book;

+-----+-----+-----+

| bid | bname | qty |

+-----+-----+-----+

| 1 | DBMS | 25 |

| 3 | Gate | 10 |

| 4 | SPOS | 30 |

+-----+-----+-----+

3 rows in set (0.001 sec)

MySQL [TEB_41]> select * from lib_Audit;

+-----+-----+-----+

| bid | bname | qty |

+-----+-----+-----+

| 2 | CNS | 47 |

| 3 | TOC | 10 |

+-----+-----+-----+

2 rows in set (0.001 sec)

