**Assignment Group: A**

**Assignment NO 8**

**Assignment Title**: 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 TEB19 -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)

Copyright (c) 2000, 2018, Oracle, MariaDB Corporation Ab and others.

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

MySQL [(none)]> use TEB19;

Database changed

MySQL [TEB19]> create table lib\_Audit(bid int,bname varchar(20),qty int);

Query OK, 0 rows affected (0.482 sec)

MySQL [TEB19]> create table lib\_book(bid int,bname varchar(20),qty int);

Query OK, 0 rows affected (0.357 sec)

MySQL[TEB19]>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 [TEB19]> 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 [TEB19]> select \* from lib\_Audit;

Empty set (0.001 sec)

MySQL [TEB19]> drop trigger if exists Make\_audit1;

Query OK, 0 rows affected, 1 warning (0.000 sec)

MySQL [TEB19]> delimiter;

ERROR: DELIMITER must be followed by a 'delimiter' character or string

MySQL [TEB19]> delimiter //

MySQL [TEB19]> 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 [TEB19]> delimiter ;

MySQL [TEB19]> delete from lib\_book where bid=2;

Query OK, 1 row affected (0.043 sec)

MySQL [TEB19]> select \* from lib\_book;

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

| bid | bname | qty |

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

| 1 | DBMS | 25 |

| 3 | TOC | 10 |

| 4 | SPOS | 30 |

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

3 rows in set (0.001 sec)

MySQL [TEB19]> select \* from lib\_Audit;

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

| bid | bname | qty |

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

| 2 | CNS | 47 |

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

1 row in set (0.001 sec)

MySQL [TEB19]> drop trigger if exists Make\_audit2;

Query OK, 0 rows affected (0.040 sec)

MySQL [TEB19]>

MySQL [TEB19]> delimiter //

MySQL [TEB19]>

MySQL [TEB19]> 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 [TEB19]>

MySQL [TEB19]> delimiter ;

MySQL [TEB19]> 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 [TEB19]> select \* from lib\_book;

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

| bid | bname | qty |

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

| 1 | DBMS | 25 |

| 3 | Gate | 10 |

| 4 | SPOS | 30 |

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

3 rows in set (0.001 sec)

MySQL [TEB19]> select \* from lib\_Audit;

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

| bid | bname | qty |

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

| 2 | CNS | 47 |

| 3 | TOC | 10 |

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

2 rows in set (0.001 sec)