

Assignment no 7

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

```
mysql> CREATE TABLE borrower(  
->          roll_no int,  
->          name varchar(20),  
->          date_of_issue date,  
->          book varchar(20)  
-> );
```

Query OK, 0 rows affected (0.04 sec)

```
mysql> select * from borrower;
```

```
+-----+-----+-----+-----+  
| roll_no | name | date_of_issue | book |  
+-----+-----+-----+-----+  
|      1 | ABC1 | 2018-06-11    | DBMS |  
|      2 | ABC2 | 2019-07-12    | DSA  |  
|      3 | ABC3 | 2020-08-13    | SPOS |  
|      4 | ABC4 | 2021-09-14    | CNS  |  
|      5 | ABC5 | 2022-10-15    | DS   |  
+-----+-----+-----+-----+
```

5 rows in set (0.01 sec)

```
mysql> CREATE TABLE library_audit(  
->          roll_no int,  
->          name varchar(20),  
->          date_of_issue date,  
->          book varchar(20)  
-> );
```

Query OK, 0 rows affected (0.02 sec)

//INSERT TRIGGER

```
mysql> create trigger auditor after insert on borrower for each row  
-> begin  
-> insert into library_audit values(new.roll_no, new.name,  
new.date_of_issue, new.book);  
-> end;  
-> //
```

Query OK, 0 rows affected (0.01 sec)

```
mysql> INSERT INTO borrower VALUES(006 , 'ABC5', '2022-10-15', 'DS')//  
Query OK, 1 row affected (0.01 sec)
```

```
mysql> select * from library_audit;
```

```
+-----+-----+-----+-----+  
| roll_no | name | date_of_issue | book |  
+-----+-----+-----+-----+  
|      6 | ABC5 | 2022-10-15    | DS   |  
+-----+-----+-----+-----+
```

1 row in set (0.01 sec)

```
mysql> select * from borrower;
+-----+-----+-----+-----+
| roll_no | name | date_of_issue | book |
+-----+-----+-----+-----+
|      1 | ABC1 | 2018-06-11    | DBMS |
|      2 | ABC2 | 2019-07-12    | DSA  |
|      3 | ABC3 | 2020-08-13    | SPOS |
|      4 | ABC4 | 2021-09-14    | CNS  |
|      5 | ABC5 | 2022-10-15    | DS   |
|      6 | ABC5 | 2022-10-15    | DS   |
+-----+-----+-----+-----+
6 rows in set (0.00 sec)
```

//UPDATE TRIGGER

```
mysql> create trigger auditor1 after update on borrower for each row
-> begin
-> insert into library_audit
values(new.roll_no,new.name,new.date_of_issue,new.book);
-> end;
-> //
Query OK, 0 rows affected (0.01 sec)
```

```
mysql> update borrower set name = 'sahil' where roll_no = 4//
Query OK, 1 row affected (0.02 sec)
Rows matched: 1  Changed: 1  Warnings: 0
```

```
mysql> SELECT * FROM borrower;
+-----+-----+-----+-----+
| roll_no | name  | date_of_issue | book |
+-----+-----+-----+-----+
|      1 | ABC1  | 2018-06-11    | DBMS |
|      2 | ABC2  | 2019-07-12    | DSA  |
|      3 | ABC3  | 2020-08-13    | SPOS |
|      4 | sahil | 2021-09-14    | CNS  |
|      5 | ABC5  | 2022-10-15    | DS   |
|      6 | ABC5  | 2022-10-15    | DS   |
+-----+-----+-----+-----+
6 rows in set (0.00 sec)
```

```
mysql> SELECT * FROM library_audit;
+-----+-----+-----+-----+
| roll_no | name  | date_of_issue | book |
+-----+-----+-----+-----+
|      6 | ABC5  | 2022-10-15    | DS   |
|      4 | sahil | 2021-09-14    | CNS  |
+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```