

```
mysql> CREATE TABLE LIB_AUDIT(RNO INT,
-> B_TITLE VARCHAR(20),
-> ACTION VARCHAR(20));^C
mysql> CREATE TABLE BOOKS(RNO INT,
-> B_TITLE VARCHAR(20));
Query OK, 0 rows affected (0.04 sec)
```

```
mysql>
mysql> CREATE TABLE LIB_AUDIT(RNO INT,
-> B_TITLE VARCHAR(20),
-> ACTION VARCHAR(20));
Query OK, 0 rows affected (0.03 sec)
```

```
mysql> DESC LIB_AUDIT;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| RNO   | int           | YES  |     | NULL    |       |
| B_TITLE | varchar(20)   | YES  |     | NULL    |       |
| ACTION | varchar(20)   | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

```
mysql> DESC BOOKS;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| RNO   | int           | YES  |     | NULL    |       |
| B_TITLE | varchar(20)   | YES  |     | NULL    |       |
+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

```
mysql> INSERT INTO BOOKS VALUES(1, 'ABC');
Query OK, 1 row affected (0.01 sec)
```

```
mysql> INSERT INTO BOOKS VALUES(2, 'DEF');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO BOOKS VALUES(3, 'GHI');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO BOOKS VALUES(4, 'JKL');
Query OK, 1 row affected (0.00 sec)
```

```
mysql> INSERT INTO BOOKS VALUES(5, 'MNO');
Query OK, 1 row affected (0.01 sec)
```

```
mysql> SELECT *FROM BOOKS;
```

```
+-----+-----+
| RNO  | B_TITLE |
+-----+-----+
|  1  | ABC     |
|  2  | DEF     |
|  3  | GHI     |
|  4  | JKL     |
|  5  | MNO     |
+-----+-----+
```

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

```
mysql> SELECT *FROM LIB_AUDIT;
```

```
Empty set (0.00 sec)
```

```
mysql> DELIMITER $
```

```
mysql> CREATE TRIGGER before_book_delete
```

```
-> AFTER DELETE
```

```
-> ON books
```

```
-> FOR EACH ROW
```

```
-> BEGIN
```

```
-> INSERT INTO LIB_AUDIT
```

```
-> SET action = 'DELETE',
```

```
-> RNO=OLD.RNO,
```

```
-> B_TITLE=OLD.B_TITLE;
```

```
-> END;
```

```
-> $
```

```
Query OK, 0 rows affected (0.01 sec)
```

```
mysql> DELIMITER ;
```

```
mysql> DELETE FROM BOOKS WHERE RNO = 1;
```

```
Query OK, 1 row affected (0.01 sec)
```

```
mysql> SELECT *FROM BOOKS;
```

```
+-----+-----+
| RNO  | B_TITLE |
+-----+-----+
|  2  | DEF     |
|  3  | GHI     |
|  4  | JKL     |
|  5  | MNO     |
+-----+-----+
```

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

```
mysql> SELECT *FROM LIB_AUDIT;
```

```

+-----+-----+-----+
| RNO  | B_TITLE | ACTION |
+-----+-----+-----+
| 1    | ABC    | DELETE |
+-----+-----+-----+
1 row in set (0.00 sec)

```

```

mysql> DELIMITER $
mysql> CREATE TRIGGER before_book_update
-> BEFORE UPDATE
-> ON BOOKS
-> FOR EACH ROW
-> BEGIN
-> INSERT INTO LIB_AUDIT
-> SET action = 'UPDATE',
-> RNO=NEW.RNO,
-> B_TITLE=NEW.B_TITLE;
-> END;
-> $

```

Query OK, 0 rows affected (0.02 sec)

```

mysql> DELIMITER ;
mysql> UPDATE BOOKS SET B_TITLE = 'XYZ' WHERE RNO = 2;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1 Changed: 1 Warnings: 0

```

```

mysql> SELECT* FROM BOOKS;
+-----+-----+-----+
| RNO  | B_TITLE |
+-----+-----+
| 2    | XYZ    |
| 3    | GHI    |
| 4    | JKL    |
| 5    | MNO    |
+-----+-----+
4 rows in set (0.00 sec)

```

```

mysql> SELECT* FROM LIB_AUDIT;
+-----+-----+-----+
| RNO  | B_TITLE | ACTION |
+-----+-----+-----+
| 1    | ABC    | DELETE |
| 2    | XYZ    | UPDATE |
+-----+-----+-----+
2 rows in set (0.00 sec)

```