

```
***** Trigger Before Update / After Update
*****
```

```
create table library(Book_ID int, BOOK_STATUS_ID varchar(20),
Current_Timestamp timestamp);
```

```
create table library_audit_row_lvl(Book_ID int, Book_status_ID
varchar(20), update_TS timestamp);
```

```
insert into library values(101,'I', systimestamp);
```

```
insert into library values(102,'I', systimestamp);
select *from library;
SELECT * FROM library_audit_row_lvl;
```

```
CREATE OR REPLACE TRIGGER "TRIGGER_ROW_LVL_BEFORE_UPDATE" BEFORE UPDATE
OF BOOK_STATUS_ID ON LIBRARY
FOR EACH ROW
BEGIN
    INSERT INTO LIBRARY_AUDIT_ROW_LVL(BOOK_ID, BOOK_STATUS_ID,
UPDATE_TS) VALUES (:old.BOOK_ID, :old.BOOK_STATUS_ID, CURRENT_TIMESTAMP);
END;
/
```

```
update library set BOOK_STATUS_ID = 'R' where Book_ID = 101;
select *from library;
SELECT * FROM library_audit_row_lvl;
```

```
truncate table library_audit_row_lvl;
truncate table library;
```

```
drop table library_audit_row_lvl;
drop table library;
***** Trigger Before Delete / After Delete
*****
```

```
create table library(Book_ID int, BOOK_STATUS_ID varchar(20),
Current_Timestamp timestamp);
```

```
create table library_audit_row_lvl(Book_ID int, Book_status_ID
varchar(20), update_TS timestamp);
```

```
desc library;
```

```
desc library_audit_row_lvl;
```

```
insert into library values(101,'I', systimestamp);
```

```
insert into library values(102,'I', systimestamp);
```

```
select *from library;
```

```
SELECT * FROM library_audit_row_lvl;

CREATE OR REPLACE TRIGGER "TRIGGER_ROW_LVL_AFTER_DELETE" AFTER DELETE ON
LIBRARY
FOR EACH ROW
BEGIN
    INSERT INTO LIBRARY_AUDIT_ROW_LVL(BOOK_ID, BOOK_STATUS_ID,
UPDATE_TS) VALUES (:old.BOOK_ID, :old.BOOK_STATUS_ID, CURRENT_TIMESTAMP);
END;
/
select *from library;
SELECT * FROM library_audit_row_lvl;

DELETE FROM library where Book_ID = 101;

select *from library;
SELECT * FROM library_audit_row_lvl;

truncate table library_audit_row_lvl;
truncate table library;
drop table library_audit_row_lvl;
drop table library;
```