

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.

**PL/SQL Block: -**

```
CREATE TABLE lib_tab(book_name VARCHAR2(25),status VARCHAR2(15));

CREATE TABLE library_audit(date_modified DATE, book_name VARCHAR2(25),old_status
    VARCHAR(15),new_status VARCHAR2(15),action VARCHAR2(25));

INSERT INTO lib_tab VALUES('TOC','AVAILABLE');
INSERT INTO lib_tab VALUES('DSA','UNAVAILABLE');
INSERT INTO lib_tab VALUES('CNS','AVAILABLE');
INSERT INTO lib_tab VALUES('SPOS','UNAVAILABLE');
INSERT INTO lib_tab VALUES('IOT_ES','AVAILABLE');

CREATE OR REPLACE TRIGGER trigger_1
AFTER UPDATE OR DELETE OR INSERT ON lib_tab FOR EACH ROW
ENABLE
BEGIN
    IF UPDATING THEN
        dbms_output.put_line(:OLD.status);
        INSERT INTO library_audit VALUES
(SYSDATE,:OLD.book_name,:OLD.status,:NEW.status,'UPDATE');
    ELSIF INSERTING THEN
        dbms_output.put_line(:NEW.status);
        INSERT INTO library_audit VALUES
(SYSDATE,:NEW.book_name,:OLD.status,:NEW.status,'INSERT');
    ELSE
        dbms_output.put_line(:OLD.book_name||'deleting');
        INSERT INTO library_audit
VALUES(SYSDATE,:OLD.book_name,:OLD.status,:NEW.status,'DELETE');
    END IF;
END;

/

SELECT * FROM lib_tab;
```

BOOK_NAME	STATUS
TOC	AVAILABLE
DSA	UNAVAILABLE
CNS	AVAILABLE
SPOS	UNAVAILABLE
IOT_ES	AVAILABLE

```
DELETE FROM lib_tab WHERE book_name = 'CNS';
UPDATE lib_tab SET status = 'UNAVAILABLE' WHERE book_name = 'TOC';
UPDATE lib_tab SET status = 'PRE-ORDER' WHERE book_name = 'SPOS';
UPDATE lib_tab SET status = 'AVAILABLE' WHERE book_name = 'IOT_ES';
INSERT INTO lib_tab VALUES('DBMS','AVAILABLE');
```

```
SELECT * FROM library_audit;
```

DATE_MODIFIED	BOOK_NAME	OLD_STATUS	NEW_STATUS	ACTION
02-OCT-24	CNS	AVAILABLE	-	DELETE
02-OCT-24	TOC	AVAILABLE	UNAVAILABLE	UPDATE
02-OCT-24	SPOS	UNAVAILABLE	PRE-ORDER	UPDATE
02-OCT-24	IOT_ES	AVAILABLE	AVAILABLE	UPDATE
02-OCT-24	DBMS	-	AVAILABLE	INSERT

```
SELECT * FROM lib_tab;
```

BOOK_NAME	STATUS
TOC	UNAVAILABLE
DSA	UNAVAILABLE
SPOS	PRE-ORDER
IOT_ES	AVAILABLE
DBMS	AVAILABLE