

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.

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SQL> SET SERVEROUT ON

SQL> SET VERIFY OFF

SQL> CREATE TABLE Lib_1(book_name VARCHAR2(25),status VARCHAR2(15));

Table created.

SQL> INSERT INTO Lib_1 VALUES('DARK MATTER','AVAILABLE');

1 row created.

SQL> INSERT INTO Lib_1 VALUES ('SILENT HILL','UNAVAILABLE');

1 row created.

SQL> INSERT INTO Lib_1 VALUES('GOD OF WAR','AVAILABLE');

1 row created.

SQL> INSERT INTO Lib_1 VALUES('SPIDER-MAN','UNAVAILABLE');

1 row created.

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

Table created.

SQL> CREATE OR REPLACE TRIGGER Trig

AFTER UPDATE OR DELETE OR INSERT ON Lib_1 FOR EACH ROW

ENABLE

BEGIN

IF UPDATING THEN

dbms_output.put_line(:OLD.status);

INSERT INTO library_ad VALUES
(SYSDATE,:OLD.book_name,:OLD.status,:NEW.status,'UPDATE');

ELSIF INSERTING THEN

dbms_output.put_line(:NEW.status);

INSERT INTO library_ad VALUES
(SYSDATE,:NEW.book_name,:OLD.status,:NEW.status,'INSERT');

```

ELSE
dbms_output.put_line(:OLD.book_name||'deleting');
INSERT INTO library_ad
VALUES(SYSDATE,:OLD.book_name,:OLD.status,:NEW.status,'DELETE');
END IF;
END;
/

```

Trigger created.

```
SQL> UPDATE Lib_1 SET status = 'PRE-ORDER' WHERE book_name = 'GOD OF WAR';
```

AVAILABLE

1 row updated.

```
SQL> INSERT INTO Lib_1 VALUES('SPM','UNAVAILABLE');
```

UNAVAILABLE

1 row created.

```
SQL> UPDATE Lib_1 SET status = 'UNAVAILABLE' WHERE book_name = 'DARK MATTER';
```

AVAILABLE

1 row updated.

```
SQL> DELETE FROM Lib_1 WHERE book_name = 'SILENT HILL';
```

SILENT HILLdeleting

1 row deleted.

```
SQL> Select * from Lib_1;
```

BOOK_NAME	STATUS
DARK MATTER	UNAVAILABLE
GOD OF WAR	PRE-ORDER
SPIDER-MAN	UNAVAILABLE
SPM	UNAVAILABLE

SQL> Select * from library_ad;

DATE_MODI	BOOK_NAME	OLD_STATUS	NEW_STATUS
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ACTION

30-SEP-24	GOD OF WAR	AVAILABLE	PRE-ORDER
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UPDATE

30-SEP-24	SPM	UNAVAILABLE	
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INSERT

30-SEP-24	DARK MATTER	AVAILABLE	UNAVAILABLE
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UPDATE

DATE_MODI	BOOK_NAME	OLD_STATUS	NEW_STATUS
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ACTION

30-SEP-24	SILENT HILL	UNAVAILABLE	
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DELETE