

Database Queries for Assignment-A8

Creating tables

Library table:

```
CREATE TABLE Library(  
    id NUMBER(12),  
    title VARCHAR(255),  
    dateofissue DATE,  
    author VARCHAR(255)  
);
```

Library_Audit table:

```
CREATE TABLE Library_Audit(  
    id NUMBER(12),  
    title VARCHAR(255),  
    dateofaction DATE,  
    author VARCHAR(255),  
    status VARCHAR(255)  
);
```

Inserting values

Library table:

```
INSERT INTO Library VALUES (1, 'Berserk', TO_DATE('2024-07-28','YYYY-MM-DD'), 'Prashant');  
INSERT INTO Library VALUES (2, 'Dark', TO_DATE('2024-07-15','YYYY-MM-DD'), 'Rajendra');  
INSERT INTO Library VALUES (3, 'Hannibal', TO_DATE('2024-07-20','YYYY-MM-DD'), 'Manoj');  
INSERT INTO Library VALUES (4, 'AOT', TO_DATE('2024-07-30','YYYY-MM-DD'), 'Rajesh');  
INSERT INTO Library VALUES (5, 'GOT', TO_DATE('2024-07-19','YYYY-MM-DD'), 'Anil');
```

Trigger

```
CREATE OR REPLACE TRIGGER library_action  
AFTER INSERT OR UPDATE OR DELETE ON Library  
FOR EACH ROW  
BEGIN  
    IF INSERTING THEN  
        INSERT INTO Library_Audit (id, title, dateofaction, author, status) VALUES (:NEW.id, :NEW.title, current_timestamp, :NEW.author, :NEW.status);  
    ELSIF UPDATING THEN  
        INSERT INTO Library_Audit (id, title, dateofaction, author, status) VALUES (:OLD.id, :OLD.title, current_timestamp, :OLD.author, :OLD.status);  
    ELSIF DELETING THEN  
        INSERT INTO Library_Audit (id, title, dateofaction, author, status) VALUES (:OLD.id, :OLD.title, current_timestamp, :OLD.author, :OLD.status);  
    END IF;  
END;  
/
```

Testing trigger

Insert operation

```
INSERT INTO Library VALUES (15, 'CREW', TO_DATE('2024-07-22','YYYY-MM-DD'), 'Ramesh');
INSERT INTO Library VALUES (14, 'Nineteen Eighty Four', TO_DATE('2024-07-01','YYYY-MM-DD'), 'Omkar');

SELECT * FROM Library;
SELECT * FROM Library_Audit;
```

Update operation

```
UPDATE Library SET id = 6, title = 'Sherlock', author = 'Deepak' where id = 3;
UPDATE Library SET id = 7, title = 'MR. ROBOT', author = 'Varad' where id = 4;

SELECT * FROM Library;
SELECT * FROM Library_Audit;
```

Delete operation

```
DELETE FROM Library WHERE id = 1;
DELETE FROM Library WHERE id = 5;

SELECT * FROM Library;
SELECT * FROM Library_Audit;
```