Lab 7

To be familiarize with trigger.

First we need to create table for which we will give privilege to store trigger

Query:

```
CREATE TABLE audits(
   audit_id number GENERATED BY DEFAULT AS IDENTITY primary key,
   table_name varchar(50),
   transaction_name varchar(50),
   by_user varchar(50),
   transaction_date date
);
```

Output:

```
Table AUDITS created.
```

Query:

```
CREATE OR REPLACE TIGGER customers_audit_trg
        AFTER
        INSERT OR UPDATE OR DELETE
        ON customers
        FOR EACH ROW
DECLARE
        transaction_name :=CASE
                WHEN INSERTING THEN 'INSERT'
                WHEN UPDATING THEN 'UPDATE'
                WHEN DELETING THEN 'DELETE'
        END;
        INSERT INTO audits (table_name, transaction_name, by_user, transaction_date)
        VALUES('customers', transaction_name, USER, SYSDATE);
END;
```

/

Output:

```
Trigger CUSTOMERS_AUDIT_TRG compiled
```

Now, if we insert or update or delete in customers table we can then see the information in audits table

Query:

UPDATE customers

SET last_name='karki'

WHERE customer_id = 6;

	CUSTOMER_ID	FIRST_NAME	LAST_NAME	PHONE_NUMBER
1	1	Bijay	Shrestha	9876543210
2	2	Dipak	Thapa Magar	9860558458
3	3	Ramesh	Neupane	9873333210
4	4	Gaurav	Poudel	9876549990
5	5	Sailesh	Karki	9876541470
6	6	Ram	karki	9876543210

SELECT * FROM audits;

	AUDIT_ID	TABLE_NAME	TRANSACTION_NAME	BY_USER	TRANSACTION_DATE
1	1	customers	UPDATE	SYSTEM	17-DEC-21

Conclusion and discussion:

Hence, we implement trigger and become familiarize about how it keep log file of insert, update and delete in given table.