

ASSIGNMENT

Trigger Q2

Create a transparent audit system for a table clientmaster. The system has to keep track of records that have been removed or modified and when they have been removed or modified.
Table

details are given below:

AuditClient: name, bal_due, operation, Op_date

Clientmaster: c_no, name, address, bal_due

```
SQL> CREATE TABLE AuditClient(name VARCHAR(20), bal_due INTEGER, operation VARCHAR(20), Op_date DATE);
```

```
Table created.
```

```
SQL> CREATE TABLE Clientmaster(c_no INTEGER PRIMARY KEY, name VARCHAR(20), address VARCHAR(30), bal_due INTEGER);
```

```
Table created.
```

Trigger function:

```
CREATE OR REPLACE TRIGGER t
```

```
AFTER UPDATE OR DELETE ON Clientmaster
```

```
FOR EACH ROW
```

```
BEGIN
```

```
    IF (UPDATING) THEN
```

```
        INSERT INTO AuditClient VALUES(:new.name, :new.bal_due, 'UPDATE', SYSDATE);
```

```
    ELSE
```

```
        INSERT INTO AuditClient VALUES(:old.name, :old.bal_due, 'DELETE', SYSDATE);
```

```
    END IF;
```

```
END;
```

```
SQL> INSERT INTO Clientmaster VALUES(1, 'Zameel', 'ABC House', 1234);
```

```
1 row created.
```

```
SQL> UPDATE Clientmaster set bal_due=1230 WHERE c_no=1;
```

```
1 row updated.
```

```
SQL> DELETE FROM Clientmaster WHERE c_no=1;
```

```
1 row deleted.
```

```
SQL> SELECT * FROM AuditClient;
```

NAME	BAL_DUE	OPERATION	OP_DATE
Zameel	1230	UPDATE	08-FEB-23
Zameel	1230	DELETE	08-FEB-23