

❖ **ASSIGNMENT NO : 07**

**Aim : Write A Database trigger on library table system should keep track of records that are being updated or deleted the old value of updated records should deleted records be in library audit table.**

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SQL> connect Enter

user-name: system

Enter password:

Connected.

SQL> create table lib2(bno number(11),bname varchar2(11),author  
varchar2(11),allowed\_days number(11));

Table created.

SQL> insert into lib2 values(1,'IOT','Mr.Omkar',11);

1 row created.

SQL> insert into lib2 values(2,'CNS','Mr.Krishna',15);

1 row created.

SQL> insert into lib2 values(3,'DBMS','Mr.Vivek',20);

1 row created.

SQL> insert into lib2 values(4,'SPOS','Mr.Dumbre',25);

1 row created.

SQL> select \* from lib2;

BNO	BNAME	AUTHOR	ALLOWED_DAYS
1	IOT	Mr.Omkar	11
2	CNS	Mr.Krishna	15

3	DBMS	Mr.Vivek	20
4	SPOS	Mr.Dumbre	25

```
SQL> create table lib2_audit(bno number(11),old_allowed_days
number(11),new_allowed_days number(11));
```

Table created.

```
SQL> create or replace trigger trg 1
```

```
2 before update or delete on lib2
```

```
3 for each row
```

```
4 begin
```

```
5 insert into lib2_audit values(:new.bno,:old.allowed_days,:new.allowed_days);
```

```
6 end;
```

```
7 /
```

Trigger created.

```
SQL> update lib2 set allowed_days=11 where bno=1;
```

1 row updated.

```
SQL> select * from lib2
```

```
2
```

```
SQL>
```

```
SQL> select * from lib2;
```

	BNO	BNAME	AUTHOR	ALLOWED_DAYS
-----				
1	IOT	Mr.Omkar		11
2	CNS	Mr.Krishna		15
3	DBMS	Mr.Vivek		20

4 SPOS      Mr.Dumbre          25

SQL> update lib2 set allowed\_days=40 where bno=1;

1 row updated.

SQL> select \* from lib2;

BNO	BNAME	AUTHOR	ALLOWED_DAYS
1	IOT	Mr.Omkar	40
2	CNS	Mr.Krishna	15
3	DBMS	Mr.Vivek	20
4	SPOS	Mr.Dumbre	25

SQL> select \* from lib2\_audit;

BNO	OLD_ALLOWED_DAYS	NEW_ALLOWED_DAYS
1	11	11
1	11	40

SQL> delete from lib2 where bno=2;

1 row deleted.

SQL> select \* from lib2;

BNO	BNAME	AUTHOR	ALLOWED_DAYS
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1	IOT	Mr.Omkar	40
3	DBMS	Mr.Vivek	20
4	SPOS	Mr.Dumbre	25

SQL> select \* from lib2\_audit;

BNO	OLD_ALLOWED_DAYS	NEW_ALLOWED_DAYS
-----	-----	-----
1	11	11
1	11	40
	15	