

Task 6:- Triggers, Views and Sequences

Aim:- To implement triggers, views and sequences on CRUD operation.

Step 1:- Create patient table

```
CREATE TABLE patient (  
    patient_id NUMBER PRIMARY KEY,  
    patient_name VARCHAR2(50),  
    age INT,  
    status VARCHAR(20)  
);
```

Step 2:- View for active patients

```
CREATE OR REPLACE VIEW active_patients  
AS SELECT patient_id, patient_name, age  
FROM patient  
WHERE status = 'Admitted';
```

Execution:

```
INSERT INTO patient VALUES (101, 'Rahul',  
'Admitted');
```

```
INSERT INTO patient VALUES (102, 'Rishi', 40,  
'Discharged');
```

```
INSERT INTO patient VALUES (103, 'Suresh', 32,  
'Admitted');
```

COMMIT;

```
SELECT * FROM active_patients
```

Output:-

patient ID	patient_name	Age
101	Rahul	32
103	Suresh	22

Step 3:- Triggers to Restrict Deletion or Admitted Patients

CREATE OR REPLACE TRIGGER

PREVENT - admitted - delete.

BEFORE DELETE ON Patient.

FOR EACH ROW

BEGIN

IF :OLD status = 'Admitted' THEN

RAISE - APPLICATION - ERROR

('2000', 'cannot delete admitted Patient')

END IF;

END;

Execution:-

DELETE FROM Patient WHERE Patient-  
id = 101;

Output:-

ORA - 2000 : cannot delete Admitted Patient

ORA - 06512 : at "PREVENT - ADMITTED -  
DELETE",

Line 3

Step 4:- Exception Handling in UPDATE

DECLARE

v-id Patient id %TYPE := 200;

v-name Patient name %TYPE;



BEGIN

UPDATE Patient

SET Patient - name = 'nema'

WHERE Patient - id = V - id;

IF SQL%ROWCOUNT = 0 THEN

RAISE - APPLICATION - ERROR (-2002, 1

No Patient found with ID' || V - id);

END IF;

EXCEPTION

WHEN OTHERS THEN

dbms - output . put - line ('Error: || SQLERRM);

END;

Output:-

ERROR :ORA - 20002. No Patient found with  
20200

Steps:- After insert trigger for Audit

CREATE TABLE Patient - audit (

audit - id Number generated Always

~~AOS~~

IDENTITY

Patient - id Number,

action VARCHAR2(20),

action - date Date

);

CREATE OR REPLACE TRIGGER

audit - Patient - insert

AFTER INSERT ON Patient

FOR EACH ROW

BEGIN

INSERT INTO patient\_audit (patient\_id,  
action, action date)

VALUES (:NEW.patient\_id, 'INSERT' SYSDATE);

END;

Execution:-

INSERT INTO patients VALUES (104,  
meena, 25, 'admitted');

SELECT \* FROM patient\_audit;

Output:-

AUDIT-ID	Patient ID	Action	Action-DATE
1	104	INSERT	19-sep-25

VEL TECH - CSE	
EX NO.	08
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	A
RECORD (5)	1
TOTAL (20)	14
SIGN WITH DATE	08

Result:- Thus, the triggers, views and  
exception were successfully executed.