Task 6: Triggers, views. and Exceptions

2/9/25

Aim:

To implement Triggers, views and exception exception on crud operation

Step 1: create patient table

```
create Table patient(
    patient_id Number Primary key,
    patient_Name vorchar(50),
    age INT,
    Status vorchar(20)
);
```

Step 2: view for Active patient

```
create or Replace view active_Patient
AS SELECT Patient_id, Patient_ucame,
acye from patient.
```

Execution:

```
Insertion into patient values (101, 'Rahul,
33, 'Admitted');
    Insert into patient values(103, 'sorosh',
40, 'Admitted')
    Insert into patient values (102, "Sorosh",
223, "Admitted');

commit;
select * from active_Patient
```

output

Patient-ID	Patient-Name	Age
101	Rahul	82
103	Suresh	23

Step 3: Trigger to Restrict deletion of 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

    (20000),'cannot delete Admitted Patient";

End if;
end;

output:
ORA-20001: Cannot delete Admitted
                            Patient

ORA-06512: at "PREVENT_ADMITTED
                              _DELETE",

Step 4 : Exception handling in update

Declare

    v_id patient. Patient_id %. TYPE := 200;
    v_id e_patient. name % TYPE; T~

Begin

    update patient
    set patient_name = "meena"
    where patient_id = v_id;

    If SQL % Row count = 0 then
        Raise_Application_error(-2002,
            E 20002, /NO patient found with ID'// v_id));

    Exception
        when others then
        dbms_output. outline ("error : //SQLERR920)

    End;

output

    Error: ORA - 20002: NO patient found
                            with ID 200

Step 5: After insert trigger for Audit

Create Table patient_adult (
        audit_id Number Generated Alway
    Identity
        Patient_id NUMBER,
        action varchar 2(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';)

END;
/

Execution
    Insert INTO Patient values (104, 'Meena
    25, 'Admited');
        select * from Patient_audit;
output
~~output:~~

Audit_id	Patient ID	Action	Action Date
1	104	Insert	19-sep 2005

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