

15.09.25

TASK - 6

Triggers, View and Exceptions

Aim: To implement triggers, view and exceptions in SQL

Procedure:

- 1.) Create customer Table
- 2.) Insert the values
- 3.) Perform Trigger operations
- 4.) Perform View operations
- 5.) Perform Exception Handling -

1. Implementing Triggers:-

```
CREATE TABLE CUSTOMER (  
    customer_ID INT PRIMARY,  
    Name VARCHAR (50),  
    Age INT,  
    Phone VARCHAR (15),  
    Email VARCHAR (50)  
);
```

```
CREATE OR REPLACE TRIGGER Prevent_underage - customers  
BEFORE INSERT ON CUSTOMER  
FOR EACH ROW  
BEGIN
```

```
IF : NEW.AGE < 18 THEN
```

```
    RAISE APPLICATION ERROR (2000, 'CUSTOMER AGE must be  
20 or above
```

```
END IF;
```

```
END;
```

2. Create a Log Table for Customer Actions

```
CREATE TABLE CustomerLog(  
  LogID Number Primary Key,  
  CustomerID INT,  
  ActionType VARCHAR(20),  
  ActionDate TIMESTAMP DEFAULT SYSTEMSTAMP  
);
```

2.) Creating Views :-

View for Customer Contact Information

```
CREATE OR REPLACE VIEW view_customer_contacts AS  
SELECT CustomerID, Name, Phone, Email  
FROM CUSTOMER;
```

CREATE OR REPLACE VIEW view_customer_age_category AS

SELECT

CustomerID,

Name,

CASE

WHEN Age BETWEEN 20 and 30 THEN 'YOUNG'

WHEN Age BETWEEN 31 and 45 THEN 'ADULT'

WHEN Age BETWEEN 46 and 65 THEN 'MIDDLE'

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END AS AgeCategory

FROM customer;

3. Exception Handling

Sorted Procedure with Exception Handling for inserting customer Records.

CREATE OR REPLACE PROCEDURE InsertCustomer(

P-CustomerID IN INT;

P-Name IN VARCHAR,

P-Age IN INT,

P-Phone IN VARCHAR

P-Email IN VARCHAR

)

IS

BEGIN

INSERT INTO CUSTOMER (CUSTOMER ID, Name, Age, Phone, Email)

VALUES (P-CUSTOMERID, P-Name, P-Age, P-Phone, P-Email);

DBMS_OUTPUT.PUT_LINE('CUSTOMER RECORD INSERTED SUCCESSFULLY');

EXCEPTION

WHEN OTHERS THEN

DBMS_OUTPUT.PUT_LINE('ERROR : ' || SQLERRM);

END;

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EX NO.	
PERFORMANCE (5)	66
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
RECORD (5)	4
TOTAL (20)	14
DATE	

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Result: Thus, Implementation of Triggers, views, APLIERS are executed successfully