

Task 6 : Triggers , Views and Exception

Aim : To implement triggers , views and Exception in SQL

Procedure :

1. Create customer table
2. Insert the values
3. Perform trigger operation
4. Perform view operation
5. Perform exception handling.

1. Implementing triggers

```
CREATE TABLE customer (
```

```
customer ID INT PRIMARY KEY,
```

```
name VARCHAR (50),
```

```
age INT
```

```
phone VARCHAR (15),
```

```
email VARCHAR (50)
```

```
);
```

```
CREATE OR REPLACE TRIGGER prevent-underage-customer
```

```
BEFORE INSERT ON customer
```

```
FOR EACH ROW
```

```
BEGIN
```

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

```
RAISE_APPLICATION_ERROR (-20001, 'Customer
```

```
age must be 18 or above)
```

```
END IF;
```

2. create a log table for customer Actions

```
CREATE TABLE customer Log (
```

```
Log ID NUMBER PRIMARY KEY,
```

```
customer ID INT,
```

```
Action type VARCHAR (20),
```

```
Action Date TIME STAMP DEFAULT SYSTEM STAMP
```

```
);
```

2. creating views

View for customer contact information,

```
CREATE OR REPLACE VIEW view - customer Contact As.
```

```
SELECT customer ID, Name, phone, Email
```

```
FROM customer;
```

```
CREATE OR REPLACE VIEW - customer Age category
```

```
AS SELECT
```

```
customer ID,
```

```
Name,
```

```
CASE
```

```
WHEN Age BETWEEN 18 and 25 THEN 'YOUNG'
```

```
WHEN Age BETWEEN 26 and 45 THEN 'Adult'
```

```
WHEN Age BETWEEN 46 and 65 THEN 'middle Age'
```

```
ELSE Senior
```

```
END AS Age category
```

```
FROM customer;
```

3. Exception Handling

sorted procedure with Exception Handling

for inserting customer records.

CREATE OR REPLACE PROCEDURE Insert_customer (

p-customer ID IN INT,

p-Name IN VARCHAR,

p-AGE IN VARCHAR.

p-Phone IN VARCHAR

p-Email IN VARCHAR

)

IS

BEGIN

INSERT INTO customer (customer ID, Name,

Age, Phone, Email

VALUES (p-customer ID, 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;

VEL TECH-CSE	
EX NO.	06
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIDEO VOICE (5)	4
PROJECT (5)	—
TOTAL (20)	14
AVERAGE	2.8

Result: Thus, Implementation of Triggers, views
and exceptions operations are executed
and computed successfully.