

DATE  
16/9/23

## TRIGGERS AND VIEWS

### TASK-6

Aim: To automatically perform an action whenever a specific event (insert, update, delete) occurs on a mobile phone.

CREATE TABLE table and CREATE VIRTUAL SQL CUSTOMER TABLE.

CREATE TABLE CUSTOMER(

CUST-ID INT PRIMARY KEY,

CUST-NAME VARCHAR(50),

CUST-PHONE NO VARCHAR(15),

CUST-CITY VARCHAR(30),

CUST-AMOUNT PAID DECIMAL(10,2).

);

INSERT SAMPLE DATA

SQL INSERT CUSTOMER

INSERT INTO CUSTOMER VALUES

(1, 'JOH', '9876543210', 'Hyderabad', 15000);

(2, 'SMITH', '1234567890', 'Delhi', 12000);

CREATE VIEW

SQL

CREATE VIEW CUSTOMER MOBILEVIEW AS

SELECT C.CUST-ID, C.CUST-NAME, C.CUST-PH

C.CUST-CITY, M.MOBILE-NAME, M.MOB

PHONE, C.CUST-AMOUNT PAID.

FROM CUSTOMER C

JOIN mobile m

ON C.Cust-Amount Paid = m.mobile - price

Query:

SQL

SELECT \* FROM CUSTOMER mobile view;

Output

Cust-ID Cust-Name Cust

| Cust-ID<br>Amount | Cust-Name | Cust-Phone | NO Cust-City | Mobile Amount<br>Price - ₹ |
|-------------------|-----------|------------|--------------|----------------------------|
| 1                 | John      | 987653210  | Hyderabad    | 15000 15000                |
| 2                 | Smith     | 9123456780 | Delhi        | 12000 12000                |

Create Triggers

SQL

CREATE TRIGGER Check-amount-before insert

BEFORE INSERT ON CUSTOMER

FOR EACH ROW

BEGIN

DECLARE PRICE DECIMAL (10,2);

SELECT mobile-price INTO price

WHERE mobile-price = NEW.Cust-Amount  
paid

LIMIT 1;

IF price IS NULL THEN

SIGNAL SQL STATE '145000'

SET MESSAGE-TEXT = 'Invalid payment to

matching mobile found";

END IF;

END;

TEST

SQL

INSERT INTO CUSTOMER VALUES (3, 'Ajay', 'Mumbai', 8000);

OUTPUT

Error

Invalid Payment into matching mobile found;

SQL > Insert into mobile phone values

(1, 'Realme', 30,000);

Output: 1 row inserted

SQL > Select \* from mobile phone;

| Cust-Id | Cust Name | Cust-phoneno | Cust City |
|---------|-----------|--------------|-----------|
| 1       | John      | 9876543210   | Hyderabad |
| 2       | Smith     | 9123456780   | Delhi     |

| Mobile price | Amount paid |
|--------------|-------------|
| 30,000       | 30,000      |
| 15,000       | 15,000      |

| VEL TECH                |    |
|-------------------------|----|
| EX NO.                  | 12 |
| PERFORMANCE (5)         | 5  |
| RESULT AND ANALYSIS (5) | 5  |
| VIVA VOCE (5)           | 5  |
| RECORD (5)              | 1  |
| TOTAL (20)              | 18 |
| WITH DATE               |    |

Result: Thus, the implementation of triggers of views on the database has been successfully completed and verified.