

Date: 16/09/25 Topic 6 - Triggers and views

Aim: To automatically perform an action whenever a specific event occurs on a mobile phone to create a virtual table

Create table.

SQL create customer table

```
CREATE TABLE customer(  
  cust-ID INT PRIMARY KEY,  
  cust-name VARCHAR(30),  
  cust-phone no VARCHAR(15),  
  cust-city VARCHAR(20),  
  cust-Amount paid DECIMAL(10,2)  
);
```

Insert sample data

SQL Insert customer

```
INSERT INTO customer VALUES  
(1, 'John', '9876543210', 'Hyderabad', 15000),  
(2, 'Smith', '9123456780', 'Delhi', 12000);
```

Create views

SQL

```
CREATE VIEW customer_mobile_view AS  
SELECT c.cust-ID, c.cust-name, c.cust-phone no,  
c.cust-city, m.mobile-name, m.mobile-price, 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-phone no	cust-city	mobile-price	Amount paid
1	John	9876543210	Hyderabad	15000	15000
2	Smith	9123456780	delhi	12000	12000

create Trigger.

sql

CREATE TRIGGER check-amount-before-insert.

BEFORE INSERT ON customer.

FOR EACH ROW

BEGIN

DECLARE price DECIMAL (10,2);

SELECT mobile-price : NEW.cust-Amount paid

LIMIT 1;

IF price IS NULL THEN

SIGNAL SQLSTATE '45000'

SET MESSAGE_TEXT = 'Involved payment = no matching
mobile found!';

ENDIF;

END;

Test

sql

INSERT INTO customer VALUES (1, 'Ajay', 90000000, 'mumbai',
'mumbai', 8000);

Error.

Invalid payment : no matching mobile found!

sql insert into mobile phone values

(1, 'Realme', 50000);

VEL TECH	
EX NO.	
PERFORMANCE (5)	
RESULT AND ANALYSIS (5)	
IVA VOCE (5)	

Output :- 1 row deleted

SQL > select * from mobile phone;

custid	cust name	cust-phone	cust-city	mobileprice	Amount-paid
1	John	9870 547210	Hyderabad	30,000	30,000
2	Smith	9123456700	Delhi	15,000	15,000

Result:- Thus the implementation of trigger of ~~view~~ on the database has been successfully completed and verified.

VEL TECH	
EX NO.	
PERFORMANCE (5)	6
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	5
RECORD (5)	2
TOTAL (20)	
SIGN WITH DATE	12