

16/9/22 Task-6: Triggers and views

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

Create Table Phone table and create virtual

SQL Customer Table

```
CREATE TABLE customer(
```

```
    cust_ID PRIMARY KEY,
```

```
    cust_Name VARCHAR(50),
```

```
    cust_PhoneNO VARCHAR(15),
```

```
    cust_City VARCHAR(30),
```

```
    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
```

```
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-Phoneno	Cust-city	Mobile-price	Amount paid
1	John	9876543210	Hyderabad	38000	38000
2	Smith	9123456780	Delhi	15000	15000

Create Triggers

SQL

CREATE TRIGGER check-amount-before-insert

BEFORE INSERT ON Customers

FOR EACH ROW

BEGIN

DECLARE price DECIMAL(10,2);

SELECT Mobile-price INTO price

WHERE Mobile-price = NEW.Cust-AmountPaid

LIMIT 1;

IF price IS NULL THEN

SIGNAL SQL STATE '45000'

SET MESSAGE-TEXT = Invalid Payment no
matching mobile

found;

END IF;

END;

Test

SQL

INSERT INTO Customer VALUES (3, 'Ajay', '90000000',
'Mumbai', 8000);

Error

Invalid payment: no match mobile found!

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

SQL

insert into mobile phone values

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

Output: (row inserted)

SQL

select from mobilephone.

Cust Id	custName	custPhoneNo	cust city	mobile price	Amount Paid
1	John	9870543210	Hyderabad	30,000	30,000
2	Smit	9123456780	Delhi	15,000	15,000

VEL TECH	
EX NO.	6
PERFORMANCE (5)	5
RESULT AND ANALYSIS (5)	5
VIVA VOCE (5)	4
RECORD (5)	14
TOTAL (20)	38
SIGN WITH DATE	16/9

Thus implementation of trigger & views on the database has been successfully completed and verified.