MySQL Views, Conditional Statements (LAB Lecture)

Department of Information Technology
Database Systems II (IT216)
Spring 2025-2026
Week 3 – February 17, 2026
Lecturer: Soma Soleimanzadeh

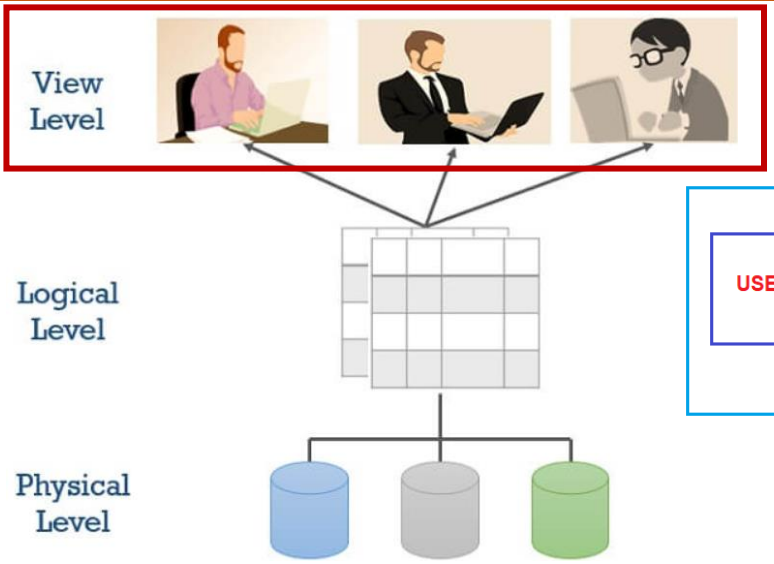
1

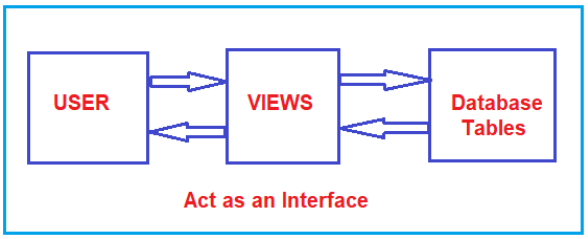
Contents

- Create View
- Conditions in MySQL
- Conditional Statements
    - CASE Statement
- Conditional Functions
    - IF( ) Function

2

View in Database





3

Syntax of Creating View in MySQL

```
CREATE VIEW view_name AS
    SELECT column_names
    FROM table_name
    WHERE condition;
```

- How to see the data in the view?

```
SELECT * FROM view_name;
```

PID	PName	Price
1	Laptop	2000
2	External Hard Disk	200
3	Mouse	20
4	Printer	1100
5	Keyboard	40

4

Let's Try It! (Creating Database and Tables)

- First Create a Database named **shop** and activate it.
- Then create the following two tables and the data inside each.
  - Both **PID** and **orderID** are ***auto_increment***.
  - Enable both **UPDATE** and **DELETE** cascades for the foreign key.

Product

PID	PName	Price
1	Laptop	2000
2	External HDD	**200**
3	Keyboard	**40**

Order

orderID	productID	Quantity
1	3	25
2	3	100
3	2	10

5

Answer – Creating Database and Tables

```
create database shop;
use shop;

create table Product
(PID int auto_increment,
PName varchar(50),
Price int,
primary key(PID));
```

```
create table Orders
(orderID int auto_increment,
productID int,
Quantity int,
primary key(orderID),
foreign key (productID) references Product(PID)
    ON update cascade
    ON delete cascade
);
```

6

Answer – Entering Data inside Tables

```
insert into Product(PName, Price) values ('Laptop', 2000),
                                         ('External HDD', 200),
                                         ('Keyboard', 40);

insert into Orders(productID, Quantity) values (3, 25),
                                               (3, 100),
                                               (2, 10);
```

7

Let's Try It! (Creating View)

- Create a view named **lowPrice** to find the **ID** and **name** of products **priced less than $300**.

```
CREATE VIEW lowPrice AS
    SELECT PID, PName
    FROM Product
    WHERE Price < 300;

SELECT * FROM lowPrice;
```

Product

PID	PName	Price
1	Laptop	2000
2	External HDD	**200**
3	Keyboard	**40**

lowPrice

PID	PName
2	External HDD
3	Keyboard

8

Let's Try It! (Creating View)

- Create a view named **highQuantity** to find the **orderID** and **name** of products **that their ordered quantity is greater than 50**.

Product

PID	PName	Price
1	Laptop	2000
2	External HDD	200
3	Keyboard	40

Order

orderID	productID	Quantity
1	3	25
2	3	100
3	2	10

```
CREATE VIEW highQuantity AS
    SELECT orderID, PName
    FROM Product, Order
    WHERE Product.PID = Order.productID AND Quantity > 50;

SELECT * FROM highQuantity;
```

highQuantity

orderID	PName
2	Keyboard

9

Syntax of CASE Statement in MySQL

```
CASE
    WHEN condition1 THEN result1
    WHEN condition2 THEN result2
    ...
    WHEN conditionN THEN resultN
    ELSE result
END;
```

10

Lab Task!

- Write a query to show the following output <u>according to the given conditions</u>:

Conditions

- **Price ≥ 900** → PriceLevel : '**Expensive**'
- **200 ≤ Price < 900** → PriceLevel : '**Reasonable**'
- **0 ≤ Price < 200** → PriceLevel : '**Cheap**'
- **Price < 0** → PriceLevel : '**Wrong Price**'

Product

PID	PName	Price
1	Laptop	2000
2	External HDD	200
3	Keyboard	40

Output

PName	Price	PriceLevel
Laptop	2000	Expensive
External HDD	200	Reasonable
Keyboard	40	Cheap

11

Answer

```
SELECT  Pname, Price,
        CASE
            WHEN  Price >= 900  THEN  'Expensive'
            WHEN  Price >=200  AND  Price < 900  THEN  'Reasonable'
            WHEN  Price >= 0  AND  Price < 200  THEN  'Cheap'
            ELSE  'Wrong Price'
        END AS  PriceLevel
FROM  Product;
```

Product

PID	PName	Price
1	Laptop	2000
2	External HDD	200
3	Keyboard	40

PName	Price	PriceLevel
Laptop	2000	Expensive
External HDD	200	Reasonable
Keyboard	40	Cheap

12