**Aggregate Functions and Grouping**

Step1: create sample table

Command : **CREATE TABLE purchases (**

**purchase\_id INT,**

**customer\_id INT,**

**product\_name VARCHAR(100),**

**quantity INT,**

**price DECIMAL(10,2),**

**purchase\_date DATE**

**);**

* 1. Insert data to Above Table

Command **: INSERT INTO purchases VALUES**

**(1, 101, 'Laptop', 2, 1000.00, '2024-06-01'),**

**(2, 102, 'Phone', 1, 500.00, '2024-06-01'),**

**(3, 101, 'Monitor', 3, 150.00, '2024-06-02'),**

**(4, 103, 'Laptop', 1, 1000.00, '2024-06-02'),**

**(5, 102, 'Keyboard', 2, 50.00, '2024-06-03');**

Step2: perform aggregate operation

Command : **SELECT AVG(price) AS avg\_price**

**FROM purchases;**

* 1. calucate average price

command : **SELECT AVG(price) AS avg\_price**

**FROM purchase**;

* 1. count total purchase

command : **SELECT COUNT(\*) AS total\_orders**

**FROM purchase;**

Step3v: group by operation:

Command : **SELECT product\_name, SUM(quantity) AS total\_quantity\_sold**

**FROM purchase**

**GROUP BY product\_name;**

1.1 **SELECT customer\_id, SUM(quantity \* price) AS total\_spent**

**FROM purchase**

**GROUP BY customer\_id**

**HAVING total\_spent > 1000;**