

# SESSION 05

## BÀI 1:

```
drop database if exists Session05;
create database Session05;
use Session05;

create table Product(
    product_id int primary key,
    product_name varchar(255) not null,
    price DECIMAL(10,2) not null,
    stock int,
    status enum('active', 'inactive') not null
);

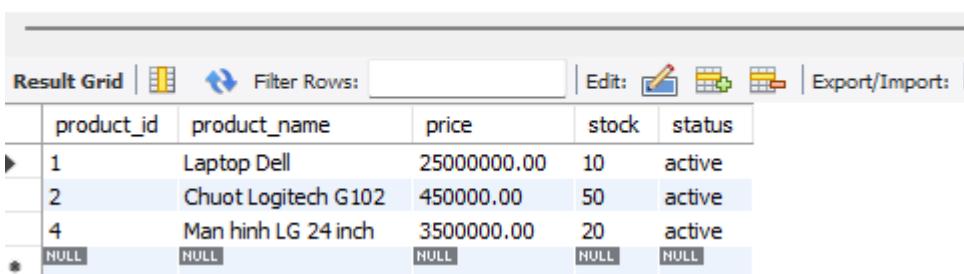
INSERT INTO Product VALUES
(1, 'Laptop Dell XPS', 25000000, 10, 'active'),
(2, 'Chuot Logitech G102', 450000, 50, 'active'),
(3, 'Ban phim co AKKO', 1200000, 0, 'inactive'),
(4, 'Man hinh LG 24 inch', 3500000, 20, 'active'),
(5, 'Tai nghe Sony', 800000, 5, 'inactive');
```

- Lấy toàn bộ sản phẩm đang có trong hệ thống

product_id	product_name	price	stock	status
1	Laptop Dell	25000000.00	10	active
2	Chuot Logitech G102	450000.00	50	active
3	Ban phim co AKKO	1200000.00	0	inactive
4	Man hinh LG 24 inch	3500000.00	20	active
5	Tai nghe Sony	800000.00	5	inactive

- Lấy danh sách sản phẩm đang bán (`status = 'active'`)

```
22 • select * from Product where status = 'active';
```



The screenshot shows the MySQL Workbench interface with the 'Result Grid' tab selected. The grid displays the results of the query 'select \* from Product where status = 'active''. The data is identical to the table above, showing five rows of product information where the status is 'active'.

	product_id	product_name	price	stock	status
▶	1	Laptop Dell	25000000.00	10	active
	2	Chuot Logitech G102	450000.00	50	active
	4	Man hinh LG 24 inch	3500000.00	20	active
*	NULL	NULL	NULL	NULL	NULL

- Lấy các sản phẩm có giá lớn hơn 1.000.000

```
24 • select * from Product where price > '1000000';
```

product_id	product_name	price	stock	status
1	Laptop Dell	25000000.00	10	active
3	Ban phim co AKKO	1200000.00	0	inactive
4	Man hinh LG 24 inch	3500000.00	20	active

- Hiển thị danh sách sản phẩm đang bán, sắp xếp theo giá tăng dần

```
23 • select * from Product where status = 'active' order by price desc;
```

product_id	product_name	price	stock	status
1	Laptop Dell	25000000.00	10	active
4	Man hinh LG 24 inch	3500000.00	20	active
2	Chuot Logitech G102	450000.00	50	active

## BÀI 2:

```
-- Bai 2
create table Customers (
    customer_id int primary key,
    full_name varchar(255),
    email varchar(255),
    city varchar(255),
    status enum('active', 'inactive')
);

insert into Customers values
(1, 'Nguyen Van An', 'an.nguyen@gmail.com', 'Ha Noi', 'active'),
(2, 'Tran Thi Bich', 'bich.tran@yahoo.com', 'Ho Chi Minh', 'inactive'),
(3, 'Le Hoang Cuong', 'cuong.le@outlook.com', 'Da Nang', 'active'),
(4, 'Pham Minh Duy', 'duy.pham@company.vn', 'Can Tho', 'active'),
(5, 'Hoang Thi Eva', 'eva.hoang@test.com', 'Hai Phong', 'inactive');
```

- Lấy danh sách tất cả khách hàng

customer_id	full_name	email	city	status
1	Nguyen Van An	an.nguyen@gmail.com	Ha Noi	active
2	Tran Thi Bich	bich.tran@yahoo.com	Ho Chi Minh	inactive
3	Le Hoang Cuong	cuong.le@outlook.com	Da Nang	active
4	Pham Minh Duy	duy.pham@company.vn	Can Tho	active
5	Hoang Thi Eva	eva.hoang@test.com	Hai Phong	inactive

- Lấy khách hàng ở TP.HCM

```
41 • select * from Customers where city = 'Ho Chi Minh';
```

Result Grid | Filter Rows: Edit: Export

customer_id	full_name	email	city	status
2	Tran Thi Bich	bich.tran@yahoo.com	Ho Chi Minh	inactive

- Lấy khách hàng đang hoạt động và ở Hà Nội

```
3 • select * from Customers where status = 'active' and city = 'Ha Noi';
```

Result Grid | Filter Rows: Edit: Export/Import: Wrap Cell Content:

customer_id	full_name	email	city	status
1	Nguyen Van An	an.nguyen@gmail.com	Ha Noi	active

- Sắp xếp danh sách khách hàng theo tên (A → Z)

```
45 • SELECT * FROM Customers ORDER BY SUBSTRING_INDEX(full_name, ' ', -1) ASC, full_name ASC;
```

Result Grid | Filter Rows: Edit: Export/Import: Wrap Cell Content:

customer_id	full_name	email	city	status
1	Nguyen Van An	an.nguyen@gmail.com	Ha Noi	active
2	Tran Thi Bich	bich.tran@yahoo.com	Ho Chi Minh	inactive
3	Le Hoang Cuong	cuong.le@outlook.com	Da Nang	active
4	Pham Minh Duy	duy.pham@company.vn	Can Tho	active
5	Hoang Thi Eva	eva.hoang@test.com	Hai Phong	inactive

## BÀI 3:

```
-- Bai 3
• create table orders (
    order_id int primary key,
    customer_id int,
    total_amount decimal(10, 2),
    order_date date,
    status enum('pending', 'completed', 'cancelled'),
    FOREIGN KEY (customer_id) REFERENCES Customers(customer_id)
);
• INSERT INTO orders VALUES
    (101, 1, 15000000, '2024-03-01', 'completed'),
    (102, 2, 5500000, '2024-03-02', 'pending'),
    (103, 1, 200000, '2024-03-03', 'cancelled'),
    (104, 4, 3200000, '2024-03-05', 'completed'),
    (105, 5, 90000, '2024-03-07', 'pending');

    ○ Lấy danh sách đơn hàng đã hoàn thành
--
```

62 • select \* from orders where status = 'completed'

Result Grid					
	order_id	customer_id	total_amount	order_date	status
	101	1	15000000.00	2024-03-01	completed
	104	4	3200000.00	2024-03-05	completed

- Lấy các đơn hàng có tổng tiền > 5.000.000

63 • select \* from orders where total\_amount > '5000000';

Result Grid					
	order_id	customer_id	total_amount	order_date	status
	101	1	15000000.00	2024-03-01	completed
	102	2	5500000.00	2024-03-02	pending
	NULL	NULL	NULL	NULL	NULL

- Hiển thị 5 đơn hàng mới nhất

64 • `select * from orders order by order_date desc limit 5;`

	order_id	customer_id	total_amount	order_date	status
▶	105	5	90000.00	2024-03-07	pending
	104	4	3200000.00	2024-03-05	completed
	103	1	200000.00	2024-03-03	cancelled
	102	2	5500000.00	2024-03-02	pending
	101	1	15000000.00	2024-03-01	completed

- Hiển thị các đơn hàng đã hoàn thành, sắp xếp theo tổng tiền giảm dần

65 • `select * from orders where status = 'completed' order by total_amount desc;`

	order_id	customer_id	total_amount	order_date	status
	101	1	15000000.00	2024-03-01	completed
	104	4	3200000.00	2024-03-05	completed

## BÀI 4:

```
-- Bài 1 + Bài 4
• create table Products(
    product_id int primary key,
    product_name varchar(255) not null,
    price DECIMAL(10,2) not null,
    stock int,
    status enum('active', 'inactive') not null,
    sold_quantity  int
);

• INSERT INTO Products VALUES
(1, 'Laptop Dell', 25000000, 10, 'active', 10),
(2, 'Chuot Logitech G102', 4500000, 50, 'active', 3),
(3, 'Ban phim co AKKO', 1200000, 0, 'inactive', 4),
(4, 'Man hinh LG 24 inch', 3500000, 20, 'active', 6),
(5, 'Tai nghe Sony', 800000, 5, 'inactive', 9),
(6, 'USB Kingston 32GB', 150000, 100, 'active', 200),
(7, 'Lot chuot Razer', 200000, 30, 'active', 50),
(8, 'Webcam Logitech', 900000, 15, 'active', 15),
(9, 'Ghe Cong Thai Hoc', 4500000, 5, 'active', 2),
```

- Lấy 10 sản phẩm bán chạy nhất

```
38 • select * from Products order by sold_quantity desc limit 10;
```

product_id	product_name	price	stock	status	sold_quantity
6	USB Kingston 32GB	1500000.00	100	active	200
13	Day cap HDMI	1000000.00	50	active	100
14	Gia do Laptop	3500000.00	40	active	60
7	Lot chuot Razer	2000000.00	30	active	50
15	Ram 8GB DDR4	7000000.00	25	active	45
12	Loa Bluetooth JBL	15000000.00	12	active	30
10	Den man hinh Baseus	6000000.00	20	active	25
8	Webcam Logitech	9000000.00	15	active	15
11	Macbook Air M1	18000000.00	8	active	12
1	Laptop Dell	25000000.00	10	active	10

- Lấy 5 sản phẩm bán chạy tiếp theo (bỏ qua 10 sản phẩm đầu)

```
40 • select * from Products order by sold_quantity desc limit 5 offset 10;
```

product_id	product_name	price	stock	status	sold_quantity
5	Tai nghe Sony	800000.00	5	inactive	9
4	Man hinh LG 24 inch	3500000.00	20	active	6
3	Ban phim co AKKO	1200000.00	0	inactive	4
2	Chuot Logitech G102	450000.00	50	active	3
9	Ghe Cong Thai Hoc	4500000.00	5	active	2

- Hiển thị danh sách sản phẩm giá < 2.000.000, sắp xếp theo số lượng bán giảm dần

```
42 • select * from Products where price < 2000000 order by sold_quantity desc;
```

Result Grid						
	product_id	product_name	price	stock	status	sold_quantity
·	6	USB Kingston 32GB	1500000.00	100	active	200
	13	Day cap HDMI	1000000.00	50	active	100
	14	Gia do Laptop	3500000.00	40	active	60
	7	Lot chuot Razer	2000000.00	30	active	50
	15	Ram 8GB DDR4	7000000.00	25	active	45
	12	Loa Bluetooth JBL	1500000.00	12	active	30
	10	Den man hinh Baseus	6000000.00	20	active	25
	8	Webcam Logitech	9000000.00	15	active	15
	5	Tai nghe Sony	8000000.00	5	inactive	9
	3	Ban phim co AKKO	12000000.00	0	inactive	4

## BÀI 5:

```
-- Bai 3 + Bai 5

create table orders (
    order_id int primary key,
    customer_id int,
    total_amount decimal(10, 2),
    order_date date,
    status enum('pending', 'completed', 'cancelled'),

    FOREIGN KEY (customer_id) REFERENCES Customers(customer_id)
);

INSERT INTO orders VALUES
(101, 1, 15000000, '2024-03-01', 'completed'),
(102, 2, 5500000, '2024-03-02', 'pending'),
(103, 1, 200000, '2024-03-03', 'cancelled'),
(104, 4, 3200000, '2024-03-05', 'completed'),
(105, 5, 90000, '2024-03-07', 'pending');
```

- Trang 1: hiển thị 5 đơn hàng mới nhất

```
l01 -- Hiển thị 5 đơn hàng mới nhất
l02 • select * from orders where status != 'cancelled' order by order_date desc limit 5 offset 0;
```

order_id	customer_id	total_amount	order_date	status
120	5	350000.00	2024-03-22	completed
119	4	2200000.00	2024-03-21	completed
118	1	1800000.00	2024-03-20	pending
116	2	1000000.00	2024-03-18	completed
115	5	700000.00	2024-03-17	completed

- Trang 2: hiển thị 5 đơn hàng tiếp theo

```
l4 • select * from orders where status != 'cancelled' order by order_date desc limit 5 offset 5;
```

order_id	customer_id	total_amount	order_date	status
114	4	600000.00	2024-03-16	pending
113	1	950000.00	2024-03-15	completed
111	2	3000000.00	2024-03-13	pending
110	5	1500000.00	2024-03-12	completed
109	4	2500000.00	2024-03-11	completed

- Trang 3: hiển thị 5 đơn hàng tiếp theo

```
l6 • select * from orders where status != 'cancelled' order by order_date desc limit 5 offset 10;
```

order_id	customer_id	total_amount	order_date	status
108	1	800000.00	2024-03-10	pending
106	2	1200000.00	2024-03-08	completed
105	5	90000.00	2024-03-07	pending
104	4	3200000.00	2024-03-05	completed
102	2	550000.00	2024-03-02	pending

## BÀI 6:

- Trang 1

```
6 • select * from Products where status = 'active' and price between 1000000 and 3000000 order by price asc limit 10 offset 0;
```

order_id	customer_id	total_amount	order_date	status
108	1	800000.00	2024-03-10	pending
106	2	1200000.00	2024-03-08	completed
105	5	90000.00	2024-03-07	pending
104	4	3200000.00	2024-03-05	completed
102	2	550000.00	2024-03-02	pending

- Trang 2

37 • `select * from Products where status = 'active' and price between 1000000 and 3000000 order by price asc limit 10 offset 10;`

result Grid | Filter Rows:  | Edit: | Export/Import: | Wrap Cell Content: | Fetch rows:

order_id	customer_id	total_amount	order_date	status
108	1	800000.00	2024-03-10	pending
106	2	1200000.00	2024-03-08	completed
105	5	90000.00	2024-03-07	pending
104	4	3200000.00	2024-03-05	completed
102	2	550000.00	2024-03-02	pending