

## BÀI TẬP THỰC HÀNH 2

### Câu 1:

- Truy vấn:

```
SELECT productName, productLine, buyPrice
FROM products
WHERE productLine = 'Motorcycles';
```

- Kết quả:

productName	productLine	buyPrice
1969 Harley Davidson Ultimate Chopper	Motorcycles	48.81
1996 Moto Guzzi 1100i	Motorcycles	68.99
2003 Harley-Davidson Eagle Drag Bike	Motorcycles	91.02
2002 Suzuki XREO	Motorcycles	66.27
1936 Harley Davidson El Knucklehead	Motorcycles	24.23
1957 Vespa GS150	Motorcycles	32.95
1997 BMW R 1100 S	Motorcycles	60.86

### Câu 2:

- Kết quả sau khi thực hiện truy vấn: Hệ thống báo lỗi 1064.

#	Time	Action	Message	Duration / Fetch
32	01:09:31	describe orderdetails	5 row(s) returned	0.000 sec / 0.000 sec
33	01:10:03	describe orders	7 row(s) returned	0.000 sec / 0.000 sec
34	01:20:16	SELECT productName, productLine, buyPrice FROM products WHERE productLine = 'Motorcycles' LIMIT 0, ...	13 row(s) returned	0.000 sec / 0.000 sec
35	01:31:40	SELECT productName, productLine, buyPrice FROM products, WHERE buyPrice < '20' OR buyPrice > '90'	Error Code: 1064. You have an error in your SQL syntax; check the manual that corresponds to your MySQL se...	0.000 sec

- Nguyên nhân:
  1. Sai cú pháp vì dấu phẩy sau “products,” là thừa.
  2. Dùng dấu nháy đơn cho số, làm cho 20 và 90 bị hiểu thành chuỗi, dẫn tới so sánh không đúng bản chất số học.
- Truy vấn sau khi đã sửa:

```
SELECT productName, productLine, buyPrice
FROM products
WHERE buyPrice < 20 OR buyPrice > 90;
```

- Kết quả:

productName	productLine	buyPrice
1952 Alpine Renault 1300	Classic Cars	98.58
2003 Harley-Davidson Eagle Drag Bike	Motorcycles	91.02
1962 Lancia Delta 16V	Classic Cars	103.42
1968 Ford Mustang	Classic Cars	95.34
2001 Ferrari Enzo	Classic Cars	95.59
1995 Honda Civic	Classic Cars	93.89
1998 Chrysler Plymouth Prowler	Classic Cars	101.51

### Câu 3.1:

- Truy vấn:

```
SELECT DISTINCT status
FROM orders;
```

- Kết quả:

Result Grid	Filter Rows:	Export:	Wrap Cell Content:
status			
Shipped			
Resolved			
Cancelled			
On Hold			
Disputed			
In Process			

### Câu 3.2:

- Truy vấn:

```
SELECT COUNT(orderNumber) AS soDonHang
FROM orders
WHERE status = 'Shipped'
AND YEAR(orderDate) = 2003
AND MONTH(orderDate) = 4;
```

- Kết quả:

Result Grid	Filter Rows:	Export:	Wrap Cell Content:
soDonHang			
7			

### Câu 4:

- Truy vấn:

```
SELECT country, COUNT(customerNumber) AS soLuongKhachHang
FROM customers
WHERE state IS NULL
GROUP BY country;
```

- Kết quả:

Result Grid	Filter Rows:	Export:	Wrap Cell Content:
country	soLuongKhachHang		
France	12		
Norway	1		
Poland	1		
Germany	13		
Spain	7		
Sweden	2		
Denmark	2		
Singapore	3		

### Câu 5:

- Truy vấn:

```
SELECT orderNumber, orderDate
FROM orders
WHERE orderDate BETWEEN '2003-02-01' AND '2003-02-28';
```

- Kết quả:

Result Grid	Filter Rows:	Edit:	Export/Import:	Wrap Cell Content:
orderNumber	orderDate			
10105	2003-02-11			
10106	2003-02-17			
10107	2003-02-24			
NULL	NULL			

### Câu 6:

- Kết quả sau khi thực hiện truy vấn: Hệ thống báo lỗi 1064.

#	Time	Action	Message	Duration / Fetch
41	01:44:22	SELECT country, COUNT(customerNumber) AS soLuongKhachHang FROM customers WHERE state IS NUL...	23 row(s) returned	0.000 sec / 0.000 sec
42	01:45:41	SELECT orderNumber, orderDate FROM orders WHERE orderDate BETWEEN '2003-02-01' AND '2003-02-28...	3 row(s) returned	0.000 sec / 0.000 sec
43	01:48:44	SELECT city, COUNT customerNumber AS 'soKhachHang', FROM customers GROUP BY city ORDER BY so...	Error Code: 1064. You have an error in your SQL syntax; check the manual that corresponds to your MySQL se...	0.000 sec

- Nguyên nhân:
  1. Sai cú pháp COUNT, thiếu dấu ().
  2. Sai cú pháp vì dấu phẩy sau 'soKhachHang' là thừa.

- Truy vấn sau khi đã sửa:

```
SELECT city, COUNT(customerNumber) AS soKhachHang
FROM customers
GROUP BY city
ORDER BY soKhachHang DESC;
```

- Kết quả:

city	soKhachHang
NYC	5
Madrid	5
Bridghaven	3
Singapore	3
Paris	3
Nantes	2

## Câu 7:

- Truy vấn:

```
SELECT customerName, phone, addressLine1, creditLimit
FROM customers
ORDER BY creditLimit DESC
LIMIT 5;
```

- Kết quả:

customerName	phone	addressLine1	creditLimit
Euro+ Shopping Channel	(91) 555 94 44	C/Moralzarzal, 86	227600.00
Mini Gifts Distributors Ltd.	4155551450	5677 Strong St.	210500.00
Vida Sport, Ltd	0897-034555	Grenzacherweg 237	141300.00
Muscle Machine Inc	2125557413	4092 Furth Circle	138500.00
AV Stores, Co.	(171) 555-1555	Fauntleroy Circus	136800.00

## Câu 8:

- Truy vấn:

```
SELECT productName, productDescription, quantityInStock
FROM products
WHERE productLine = 'Classic Cars'
ORDER BY productName ASC;
```

- Kết quả:

productName	productDescription	quantityInStock
1948 Porsche 356-A Roadster	This precision die-cast replica features opening ...	8826
1948 Porsche Type 356 Roadster	This model features working front and rear susp...	8990
1949 Jaguar XK 120	Precision-engineered from original Jaguar specifi...	2350
1952 Alpine Renault 1300	Turnable front wheels; steering function; detail...	7305
1952 Citroen-15CV	Precision crafted hand-assembled 1:18 scale re...	1452
1956 Porsche 356A Coupe	Features include: Turnable front wheels; steeri...	6600

## Câu 9:

- Truy vấn:

```
SELECT o.orderNumber,
       SUM(od.quantityOrdered * od.priceEach) AS tongTien,
       SUM(od.quantityOrdered) AS tongSoLuong
FROM orders o
JOIN orderdetails od ON o.orderNumber = od.orderNumber
GROUP BY o.orderNumber
HAVING SUM(od.quantityOrdered * od.priceEach) > 1000
      AND SUM(od.quantityOrdered) > 500
ORDER BY tongTien DESC;
```

- Kết quả:

orderNumber	tongTien	tongSoLuong
10165	67392.85	670
10287	61402.00	595
10310	61234.67	619
10212	59830.55	612
10207	59265.14	615
10127	58841.35	540
10204	58793.53	619

#### Câu 10:

- Truy vấn:

```
SELECT c.customerName, c.phone,
       SUM(od.quantityOrdered * od.priceEach) AS tongGiaTri
FROM customers c
JOIN orders o ON c.customerNumber = o.customerNumber
JOIN orderdetails od ON o.orderNumber = od.orderNumber
WHERE c.phone = '6505555787'
GROUP BY c.customerName, c.phone;
```

- Kết quả:

customerName	phone	tongGiaTri
Mini Wheels Co.	6505555787	66710.56

#### Câu 10.2:

- Truy vấn:

```
SELECT customerNumber, amount
FROM payments
WHERE customerNumber = 129;
```

- Kết quả:

customerNumber	amount
129	26248.78
129	23923.93
129	16537.85

### Câu 11:

- Truy vấn:

```
SELECT c.customerNumber, c.customerName,  
       SUM(od.quantityOrdered * od.priceEach) AS tong_gia_tri  
FROM customers c  
JOIN orders o ON c.customerNumber = o.customerNumber  
JOIN orderdetails od ON o.orderNumber = od.orderNumber  
WHERE c.customerNumber = 119  
GROUP BY c.customerNumber, c.customerName;
```

- Kết quả:

Result Grid	Filter Rows:	Export:	Wrap Cell Content:
customerNumber	customerName	tong_gia_tri	
119	La Rochelle Gifts	158573.12	

### Câu 11.2:

- Truy vấn:

```
SELECT p.customerNumber, SUM(p.amount) AS tong_thanh_toan  
FROM payments p  
WHERE p.customerNumber = 119  
GROUP BY p.customerNumber;
```

- Kết quả:

Result Grid	Filter Rows:	Export:	Wrap Cell Content:
customerNumber	tong_thanh_toan		
119	116949.68		

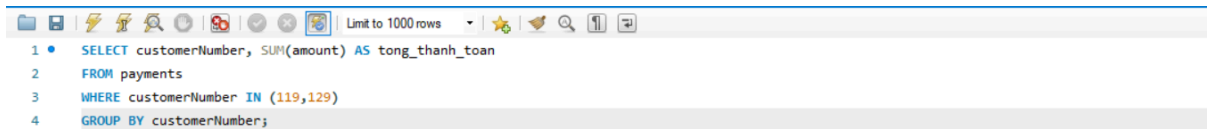
### Câu 12:

- So sánh tổng giá trị đơn hàng của khách hàng 119 và 129:

```
1 • SELECT customerNumber, SUM(quantityOrdered * priceEach) AS tong_gia_tri_don_hang  
2 FROM orders o  
3 JOIN orderdetails od ON o.orderNumber = od.orderNumber  
4 WHERE customerNumber IN (119,129)  
5 GROUP BY customerNumber;
```

Result Grid	Filter Rows:	Exports:	Wrap Cell Content:
customerNumber	tong_gia_tri_don_hang		
119	158573.12		
129	66710.56		


- So sánh tổng số tiền đã thanh toán của khách hàng 119 và 129:



```

1 • SELECT customerNumber, SUM(amount) AS tong_thanh_toan
2 FROM payments
3 WHERE customerNumber IN (119,129)
4 GROUP BY customerNumber;

```



	customerNumber	tong_thanh_toan
▶	119	116949.68
	129	66710.56

- Nhận xét:
- + Khách hàng 119: Tổng giá trị đơn hàng là 158573.12, trong khi số tiền thanh toán là 116949.68. Như vậy, khách hàng này còn nợ công ty 44623.44.
- + Khách hàng 129: Tổng giá trị đơn hàng là 66710.56, và số tiền thanh toán là 66710.56. Điều này cho thấy khách hàng này đã thanh toán đầy đủ.