

## 1. Create table customers.

```
mysql> CREATE TABLE IF NOT EXISTS customers(  
  -> id INT AUTO_INCREMENT PRIMARY KEY,  
  -> name varchar(250),  
  -> phone varchar(13) unique  
  -> );
```

Query OK, 0 rows affected (0.02 sec)

```
mysql> describe customers  
  -> ;
```

Field	Type	Null	Key	Default	Extra
id	int	NO	PRI	NULL	auto_increment
name	varchar(250)	YES		NULL	
phone	varchar(13)	YES	UNI	NULL	

3 rows in set (0.00 sec)

```
mysql> █
```

## 2. Create table orders.

```
mysql> CREATE TABLE IF NOT EXISTS orders(  
  -> id INT AUTO_INCREMENT PRIMARY KEY,  
  -> customer_id INT,  
  -> total INT,  
  -> created_at DATE,  
  -> CONSTRAINT fk_customer  
  -> FOREIGN KEY(customer_id)  
  -> REFERENCES customers(id)  
  -> );
```

Query OK, 0 rows affected (0.04 sec)

```
mysql> describe orders;
```

Field	Type	Null	Key	Default	Extra
id	int	NO	PRI	NULL	auto_increment
customer_id	int	YES	MUL	NULL	
total	int	YES		NULL	
created_at	date	YES		NULL	

4 rows in set (0.00 sec)

```
mysql> █
```

### 3. Create table order\_details.

```
mysql> CREATE TABLE IF NOT EXISTS order_details(
-> item_id INT,
-> order_id INT,
-> quantity INT,
-> CONSTRAINT fk_order_details_item_id
-> FOREIGN KEY(item_id)
-> REFERENCES items(id),
-> CONSTRAINT fk_order_details_order_id
-> FOREIGN KEY(order_id)
-> REFERENCES orders(id)
-> );
```

Query OK, 0 rows affected (0.09 sec)

```
mysql> describe order_details;
```

Field	Type	Null	Key	Default	Extra
item_id	int	YES	MUL	NULL	
order_id	int	YES	MUL	NULL	
quantity	int	YES		NULL	

3 rows in set (0.00 sec)

```
mysql> █
```

### 4. Insert new data to customers table.

```
[mysql> INSERT INTO customers(name, phone) VALUES
[   -> ('Budiawan', '+6212345678'),
[   -> ('Mary Jones', '+6287654321'),
[   -> ('Budiawan', '+6289753124');
      -> ('Tasya', '+62812345612'),
      -> ('Dwi', '+621212123456');
```

Query OK, 2 rows affected (0.05 sec)

Records: 2 Duplicates: 0 Warnings: 0

```
mysql> SELECT * FROM customers;
```

id	name	phone
1	Budiawan	+6212345678
2	Mary Jones	+6287654321
3	Budiawan	+6289753124
4	Tasya	+62812345612
5	Dwi	+621212123456

5 rows in set (0.02 sec)

```
mysql> █
```

5. Insert data into order.

```
[mysql> INSERT INTO orders(created_at, customer_id) VALUES
[    -> ('2021-10-10', 1),
[    -> ('2021-10-10', 2),
[    -> ('2021-10-10', 3),
[    -> ('2021-10-11', 1),
[    -> ('2021-10-11', 2);
```

Query OK, 5 rows affected (0.01 sec)

Records: 5 Duplicates: 0 Warnings: 0

id	customer_id	total	created_at
1	1	0	2021-10-10
2	2	0	2021-10-10
3	3	0	2021-10-10
4	1	0	2021-10-11
5	2	0	2021-10-11

5 rows in set (0.00 sec)

6. Create trigger when insert data to order\_details.

```
mysql> CREATE TRIGGER after_order_details_insert
-> AFTER INSERT ON order_details FOR EACH ROW
-> UPDATE orders
-> LEFT JOIN items ON items.id = NEW.item_id
-> SET orders.total = orders.total + (NEW.quantity * items.price)
-> WHERE orders.id = NEW.order_id;
```

Query OK, 0 rows affected (0.08 sec)

## 7. Insert data into order\_details.

```
mysql> INSERT INTO order_details(item_id, order_id, quantity) VALUES
-> (1, 1, 1),
-> (2, 1, 1),
-> (3, 2, 1),
-> (4, 2, 1),
-> (3, 3, 1),
-> (5, 3, 1),
-> (1, 4, 1),
-> (2, 4, 1),
-> (7, 5, 1),
-> (4, 5, 1);
```

Query OK, 10 rows affected (0.01 sec)  
Records: 10 Duplicates: 0 Warnings: 0

```
[mysql> SELECT * FROM order_details;
```

item_id	order_id	quantity
1	1	1
2	1	1
3	2	1
4	2	1
3	3	1
5	3	1
1	4	1
2	4	1
7	5	1
4	5	1

10 rows in set (0.00 sec)

```
mysql> █
```

## 8. Show orders data.

```
[mysql> SELECT * FROM orders;
```

id	customer_id	total	created_at
1	1	27000	2021-10-10
2	2	58000	2021-10-10
3	3	55000	2021-10-10
4	1	27000	2021-10-11
5	2	54000	2021-10-11

5 rows in set (0.00 sec)

## 9. Show Result View

```
mysql> SELECT
-> orders.id as `Order ID`,
-> orders.created_at as `Order Date`,
-> customers.name as `Customer Name`,
-> customers.phone as `Customer Phone`,
-> orders.total as `Total`,
-> GROUP_CONCAT(items.name) as `Items bought`
-> FROM orders
-> JOIN customers ON customers.id = orders.customer_id
-> JOIN order_details ON order_details.order_id = orders.id
-> JOIN items ON items.id = order_details.item_id
-> GROUP BY orders.id;
```

Order ID	Order Date	Customer Name	Customer Phone	Total	Items bought
1	2021-10-10	Budiawan	+6212345678	27000	Nasi Goreng Gila,Ice Water
2	2021-10-10	Mary Jones	+6287654321	58000	Spaghetti,Green Tea Latte
3	2021-10-10	Budiawan	+6289753124	55000	Spaghetti,Orange Juice
4	2021-10-11	Budiawan	+6212345678	27000	Nasi Goreng Gila,Ice Water
5	2021-10-11	Mary Jones	+6287654321	54000	Cordon Bleu,Green Tea Latte

5 rows in set (0.01 sec)

```
mysql> █
```