1、实例

- 查询客户Coyote Inc.的订单编号
  - 1) 先在customers表根据客户名称查询客户id
    - select cust_id from customers where cust_name="Coyote Inc.";
  - 2) 再在orders表中根据客户id查询订单编号
    - select order_num from orders where cust_id = 10001;
  - 3) 一条语句搞定

```
mysql> select order_num from orders where cust_id=(select cust_id from customers where cust_name="Coyote Inc.");
+-----------+
| order_num |
+-----------+
|     20005 |
|     20009 |
|     20010 |
|     20011 |
+-----------+
4 rows in set (0.00 sec)


mysql>
```

- 查询购买了编号为TNT2的产品的所有客户姓名?
  - 1) 先查TNT2在哪个订单
    - select * from orderitems where prod_id='TNT2';
  - 2) 通过订单再查询客户
    - select * from orders where order_num in (20005,20007);
  - 3) 再通过客户id查询客户名称
    - select cust_id, cust_name from customers where cust_id in (10001,10004);

```
mysql> select cust_id, cust_name from customers where cust_id in
    -> (select cust_id from orders where order_num in
    -> (select order_num from orderitems where prod_id='TNT2'));
+---------+----------------+
| cust_id | cust_name      |
+---------+----------------+
|   10001 | Coyote Inc.    |
|   10004 | Yosemite Place |
+---------+----------------+
2 rows in set (0.01 sec)


mysql>
```

- 查询客户Coyote Inc.的订单中购买的产品编号及数量?
  - 1) 先查客户的客户id
    - select cust_id from customers where cust_name='Coyote Inc.';
  - 2) 再通过客户id在订单表中查询订单号
    - select order_num from orders where cust_id in (10001);
  - 3) 再通过订单号去订单详情表中查询需要的信息
    - select prod_id, quantity from orderitems where order_num in
    - (select order_num from orders where cust_id in
    - (10001));

```
mysql> select prod_id, quantity from orderitems where order_num in
    -> (select order_num from orders where cust_id in
    -> (select cust_id from customers where cust_name='Coyote Inc.'));
+---------+----------+
| prod_id | quantity |
+---------+----------+
| ANV01   |       10 |
| ANV02   |        3 |
| TNT2    |        5 |
| FB      |        1 |
| FB      |        1 |
| OL1     |        1 |
| SLING   |        1 |
| ANV03   |        1 |
| ANV03   |        1 |
| ANV03   |        1 |
+---------+----------+
10 rows in set (0.00 sec)


mysql>
```

2、查询所有客户的姓名及订单编号?

- 子查询解决不了
  - 客户姓名在客户表
  - 订单编号只有订单表及订单详情表才有
  - 一张表里查询，搞不定了?
  - select * from customers;
  - select * form orders;
- 内连接