

SQL 查询

一、银行数据库

分行表: branch (branch-name, branch-city, assets)

存款账户表: account (account-number, branch-name, balance)

贷款账户表: loan (loan-number, branch-name, amount)

客户表: customer (customer-name, customer-street, customer-city)

存款人表: depositor (customer-name, account-number)

贷款人表: borrower (customer-name, loan-number)

1、找出在银行中同时有存款和贷款账户的客户（分别用带 IN 和 EXIST 谓词的嵌套查询完成）

①IN:

```
1. select distinct customer-name
2. from borrower
3. where customer-name in (select customer-name
4.                          from depositor)
```

②EXIST:

```
1. select distinct customer-name
2. from borrower
3. where customer-name exists (select * from depositor
4.                             where depositor.customer-
5.                             name =borrower.customer-name)
```

2、找出那些总资产(assets)至少比位于 Brooklyn 的某一家分行要多的支行名字（用 ANY 谓词完成）

```
1. select branch-name
2. from branch
3. where assets > any (select assets
4.                    from branch
5.                    where branch-city = 'Brooklyn')
```

3、找出平均存款余额(balance)最高的分行名字

```
1. select branch-name
2. from account
3. group by branch-name
4. having AVG >= ALL (select AVG (balance)
5.                   from account
6.                   group by branch-name)
```

二、计算机产品数据库（要求：在 SQL Server/MySQL 中创建数据库、执行查询并验证结果）

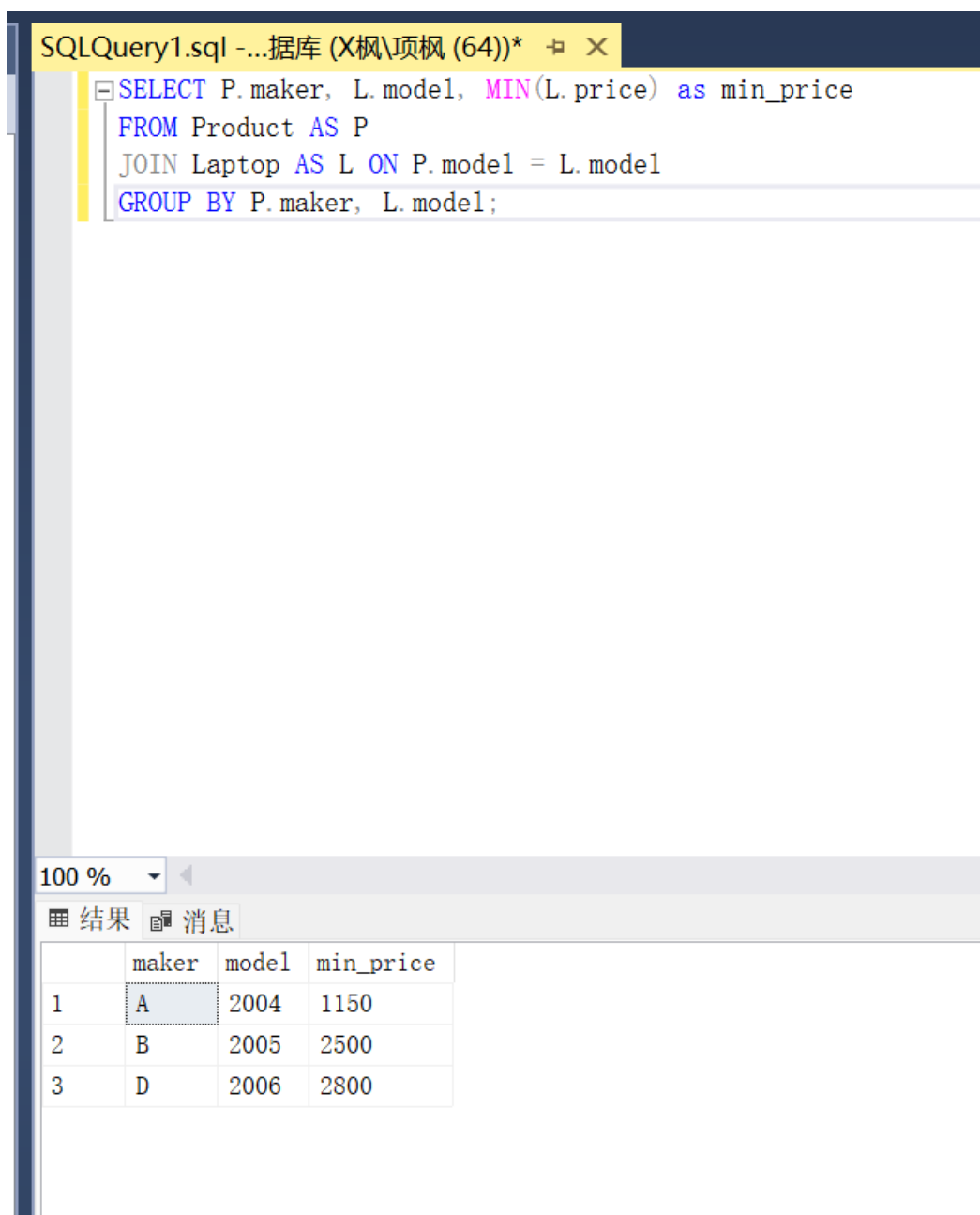
Product(maker, model, type)

PC(model, speed, ram, hd, price)

Laptop(model, speed, ram, hd, screen, price)

1、查询每个制造商及其生产的最低价格的笔记本型号

```
1. SELECT P.maker, L.model, MIN(L.price) as min_price
2. FROM Product AS P
3. JOIN Laptop AS L ON P.model = L.model
4. GROUP BY P.maker, L.model;
```



SQLQuery1.sql -...数据库 (X枫\项枫 (64))*

```
SELECT P.maker, L.model, MIN(L.price) as min_price
FROM Product AS P
JOIN Laptop AS L ON P.model = L.model
GROUP BY P.maker, L.model;
```

100 %

结果 消息

	maker	model	min_price
1	A	2004	1150
2	B	2005	2500
3	D	2006	2800

2、查询生产的笔记本的硬盘容量不小于 100GB 的制造商

```
1. SELECT DISTINCT P.maker
2. FROM Product AS P
3. JOIN Laptop AS L ON P.model = L.model
4. WHERE L.hd >= 100;
```

SQLQuery1.sql - ...数据库 (X枫\项枫 (64))*

```
SELECT DISTINCT P.maker
FROM Product AS P
JOIN Laptop AS L ON P.model = L.model
WHERE L.hd >= 100;
```

100 %

结果 消息

	maker
1	B
2	D

3、查询生产最快速度的计算机的制造商

三、用差集法查询选修了全部课程的学生姓名