第十四章：使用子查询

1、利用子查询进行过滤

/\*SELECT ORDER\_NUM FROM ORDERITEMS where prod\_id='tnt2';\*/

/\*select cust\_id from orders where order\_num in (20005,20007);\*/

select cust\_id from orders where order\_num in (SELECT ORDER\_NUM FROM ORDERITEMS where prod\_id='tnt2');

更进一步：

/\*select cust\_name,cust\_contact from customers where cust\_id in (10001,10004);\*/

select cust\_name,cust\_contact from customers where cust\_id in (select cust\_id from orders where order\_num in (SELECT ORDER\_NUM FROM ORDERITEMS where prod\_id='tnt2'));

2、作为计算字段使用子查询：(对每个客户执行一次)

1）select cust\_name,

cust\_state,

**(select count(\*)**

**from orders**

**where orders.cust\_id=customers.cust\_id) AS orders**

from customers

order by cust\_name;

2）select cust\_name,

cust\_state,

**(select count(\*)**

**from orders**

**where cust\_id=cust\_id) AS orders**

from customers

order by cust\_name;

比较以上两个查询结果，进行分析。

第十五章：联结表

1、创建联结：

Select vend\_name,prod\_name,prod\_price

From vendors,products

Where vendors.vend\_id=products.vend\_id

Order by vend\_name,prod\_name;

（等值联结，也称内部联结）

2、笛卡尔积

Select vend\_name,prod\_name,prod\_price

From vendors,products

Order by vend\_name,prod\_name;

3、内部联结：

Select vend\_name,prod\_name,prod\_price

From vendors inner join products

On vendors.vend\_id=products.vend\_id;

**(实际作用同上例1)**

4、多表联结：

Select vend\_name,prod\_name,prod\_price,quantity

From vendors,products,orderitems

Where vendors.vend\_id=products.vend\_id;

And orderitems.prod\_id=products.prod\_id

And order\_num=20005;

5、子查询嵌套

Select cust\_name,cust\_contact

Form customers

Where cust\_id in (select cust\_id form orders

Where order\_num in (select order\_num from orderitems

Where prod\_id=’tnt2’));

等价于：

Select cust\_name,cust\_contact

Form customers,orders,orderitems

Where customers.cust\_id =orders.cust\_id

And orders.order\_num=orderitems.order\_num

And prod\_id=’tnt2’;

第十六章：创建高级联结

1、使用表列名：**(as)**

Select cust\_name,cust\_contact

Form customers as c,orders as o,orderitems as oi

Where c.cust\_id =o.cust\_id

And o.order\_num=oi.order\_num

And prod\_id=’tnt2’;

2、自联结：

Select prod\_id,prod\_name

From products

Where vend\_id=(select vend\_id

From products

Where prod\_id=’dtntr’);

Select p1.prod\_id,p1.prod\_name

From products as p1, products as p2

Where p1.vend\_id=p2 vend\_id

And p2.prod\_id=’dtntr’;

3、自然联结：

Select c.\*,o.oder\_num,o.order\_date,oi.prod\_id,oi.quantity,oi.item\_price

From customers as c,orders as o,orderitems as oi

Where c.cust\_id =o.cust\_id

And o.order\_num=oi.order\_num

And prod\_id=’fb’;

4、外部联结：

Select customers.cust\_id,orders.order\_num

From customers inner join orders

On customers.cust\_id=orders.cust\_id;

对比如下外联结:

1)Select customers.cust\_id,orders.order\_num

From customers LEFT OUTER join orders

On customers.cust\_id=orders.cust\_id;

2)Select customers.cust\_id,orders.order\_num

From customers RIGHT OUTER join orders

On customers.cust\_id=orders.cust\_id;

5、带聚集函数的联结：

Select customers.cust\_id,

Customers.name,

Count(orders.order\_num) as num\_ord

From customers inner join orders

On customers.cust\_id=orders.cust\_id

Group by customers.cust\_id;

Select customers.cust\_id,

Customers.name,

Count(orders.order\_num) as num\_ord

From customers left outer join orders

On customers.cust\_id=orders.cust\_id

Group by customers.cust\_id;

第十七章：组合查询

1、

Select vend\_id,prod\_id,prod\_price

From products

Where prod\_price<=5

Union

Select vend\_id,prod\_id,prod\_price

From products

Where vend\_id in(1001,1002);

比较以下：

Select vend\_id,prod\_id,prod\_price

From products

Where prod\_price<=5

Or vend\_id in(1001,1002);

2、

Select vend\_id,prod\_id,prod\_price

From products

Where prod\_price<=5

Union all

Select vend\_id,prod\_id,prod\_price

From products

Where vend\_id in(1001,1002);

3、Select vend\_id,prod\_id,prod\_price

From products

Where prod\_price<=5

Union

Select vend\_id,prod\_id,prod\_price

From products

Where vend\_id in(1001,1002)

Order by vend\_id,prod\_price;

第十八章：全文搜索

1、启用全文本搜索支持

CREATE TABLE productnotes

(

note\_id int NOT NULL AUTO\_INCREMENT,

prod\_id char(10) NOT NULL,

note\_date datetime NOT NULL,

note\_text text NULL ,

PRIMARY KEY(note\_id),

FULLTEXT(note\_text)

) ENGINE=MyISAM;

2、进行全文本搜索（match()与against()）

Select note\_text from productnotes

Where match(note\_text) against(‘rabbit’);

Select note\_text from productnotes

Where note\_text like ‘%rabbit%’;

Select note\_text,

match(note\_text) against(‘rabbit’) as rank

from productnotes;

查询扩展

Select note\_text from productnotes

Where match(note\_text) against(‘anvils’);

布尔文本搜索（P127-130）

。。。。(自己补充）

