Join queries

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SQL> connect

Enter user-name: system

Enter password:

Connected.

SQL> create table product(pname varchar2(10), pid number(4,0));

Table created.

SQL> create table sales(pname varchar2(10), pid number(4,0),orderno number(4,0));

Table created.

SQL> insert into product values('&pname',&pid);

Enter value for pname: computer

Enter value for pid: 0001

old 1: insert into product values('&pname',&pid)

new 1: insert into product values('computer',0001)

1 row created.

SQL> /

Enter value for pname: keyboard

Enter value for pid: 0002

old 1: insert into product values('&pname',&pid)

new 1: insert into product values('keyboard',0002)

1 row created.

SQL> /

Enter value for pname: mouse

Enter value for pid: 0003

old 1: insert into product values('&pname',&pid)

new 1: insert into product values('mouse',0003)

1 row created.

SQL> /

Enter value for pname: ethernet cable

Enter value for pid: 0004

old 1: insert into product values('&pname',&pid)

new 1: insert into product values('ethernet cable',0004)

insert into product values('ethernet cable',0004)

\*

ERROR at line 1:

ORA-12899: value too large for column "SYSTEM"."PRODUCT"."PNAME" (actual: 14,

maximum: 10)

SQL> /

Enter value for pname: harddisk

Enter value for pid: 0005

old 1: insert into product values('&pname',&pid)

new 1: insert into product values('harddisk',0005)

1 row created.

SQL> insert into sales values('&pname',&pid,&orderno);

Enter value for pname: computer

Enter value for pid: 0001

Enter value for orderno: 1

old 1: insert into sales values('&pname',&pid,&orderno)

new 1: insert into sales values('computer',0001,1)

1 row created.

SQL> /

Enter value for pname: mouse

Enter value for pid: 0003

Enter value for orderno: 2

old 1: insert into sales values('&pname',&pid,&orderno)

new 1: insert into sales values('mouse',0003,2)

1 row created.

SQL> select \* from product;

PNAME PID

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computer 1

keyboard 2

mouse 3

harddisk 5

SQL> select \* from sales;

PNAME PID ORDERNO

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computer 1 1

mouse 3 2

Union

SQL> select pname from product union select pname from sales;

PNAME

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computer

harddisk

keyboard

mouse

**Intersection**

SQL> select pname from product intersect select pname from sales;

PNAME

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computer

mouse

**set difference**

SQL> select pname from product minus select pname from sales;

PNAME

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harddisk

keyboard

Cross Join

SQL> select product.pname,sales.pid, sales.orderno from product cross join sales ;

PNAME PID ORDERNO

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computer 1 1

keyboard 1 1

mouse 1 1

harddisk 1 1

computer 3 2

keyboard 3 2

mouse 3 2

harddisk 3 2

8 rows selected.

**Queries on Multiple Relations**

Self join

SQL> select product.pname,sales.pname from product,sales where product.pid=sales.pid and sales.pname=product.pname;

no rows selected

SQL> select product.pname,sales.pid from product,sales where product.pid=sales.pid and sales.pname=product.pname;

PNAME PID

---------- ----------

computer 1

mouse 3

inner join

SQL> select product.pname,sales.pid from product inner join sales on product.pid=sales.pid;

PNAME PID

---------- ----------

computer 1

mouse 3

SQL> select product.pname,sales.pid, sales.orderno from product inner join sales on product.pid=sales.pid;

PNAME PID ORDERNO

---------- ---------- ----------

computer 1 1

mouse 3 2

SQL> select product.pname,sales.pid, sales.orderno from product join sales on product.pid=sales.pid;

PNAME PID ORDERNO

---------- ---------- ----------

computer 1 1

mouse 3 2

**left outer join**

SQL> select product.pname,sales.pid, sales.orderno from product left join sales on product.pid=sales.pid;

PNAME PID ORDERNO

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computer 1 1

mouse 3 2

harddisk

keyboard

**Right outer join**

SQL> select product.pname,sales.pid, sales.orderno from product right join sales on product.pid=sales.pid;

PNAME PID ORDERNO

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computer 1 1

mouse 3 2

SQL> select product.pname,sales.pid, sales.orderno from sales right join product on product.pid=sales.pid;

PNAME PID ORDERNO

---------- ---------- ----------

computer 1 1

mouse 3 2

harddisk

keyboard

**Full outer join**

SQL> select product.pname,sales.pid, sales.orderno from sales full outer join product on product.pid=sales.pid;

PNAME PID ORDERNO

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computer 1 1

keyboard

mouse 3 2

harddisk

SQL> select product.pname,sales.pid, sales.orderno from product full outer join sales on product.pid=sales.pid;

PNAME PID ORDERNO

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computer 1 1

keyboard

mouse 3 2

harddisk

**Order by clause**

SQL> select product.pname,sales.pid, sales.orderno from product full outer join sales on product.pid=sales.pid order by sales.pname;

PNAME PID ORDERNO

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computer 1 1

mouse 3 2

harddisk

keyboard