

-- 求供应工程 J1 零件的供应商号码 SNO

```
SELECT DISTINCT SNO FROM SPJ
WHERE JNO = 'J1'
```

	SNO
1	S1
2	S2
3	S3
4	S4
5	S5

-- 求供应工程 J1 零件的供应商号码 SNO

```
SELECT DISTINCT SNO FROM SPJ
WHERE JNO = 'J1' AND
      PNO = 'P1';
```

	SNO
1	S1
2	S3

-- (3) 求供应工程 J1 零件为红色的供应商号码 SNO;

```
SELECT DISTINCT Sno
FROM SPJ
WHERE Jno = 'J1' AND
      EXISTS(
        SELECT Pno
        FROM P
        WHERE Color = '红' AND
              P.Pno = SPJ.Pno
      );
```

	Sno
1	S1
2	S3

-- (4) 求没有使用天津供应商生产的红色零件的工程号 JNO;

```
SELECT DISTINCT Jno
FROM J
WHERE not EXISTS(
  SELECT *
  FROM S,P, SPJ
  WHERE SPJ.JNO = J.JNO AND
        S.Sno = SPJ.Sno AND
        S.city = '天津' AND
        P.Pno = SPJ.Pno AND
        P.color = '红'
);
```

	Jno
1	J2
2	J5
3	J6
4	J7

-- (5) 求至少用了供应商 S1 所供应的全部零件的工程号 JNO。

```
SELECT Jno
FROM SPJ AS spj
EXCEPT
SELECT Jno
FROM SPJ AS spja
WHERE EXISTS(
  SELECT *
  FROM SPJ as spjb
  WHERE spjb.SNO = 'S1' AND
        NOT EXISTS (
          SELECT *
          FROM SPJ as spjc
          WHERE spjc.PNO = spjb.PNO AND
                spjc.JNO = spja.JNO
        )
);
```

	Jno
1	J4

-- (1) 找出所有供应商的姓名和所在城市;

```
SELECT Sname ,city
FROM S;
```

	Sname	city
1	精益	天津
2	盛锡	北京
3	东方红	北京
4	丰泰盛	天津
5	为民	上海

-- (2) 找出所有零件的名称、颜色、重量;

```
SELECT Pname,color,weight
FROM P;
```

	Pname	color	weight
1	螺母	红	12
2	螺栓	绿	17
3	螺丝刀	蓝	14
4	螺丝刀	红	14
5	凸轮	蓝	40
6	齿轮	红	30

-- (3) 找出使用供应商 S1 所供应零件的工程号码;

```
SELECT DISTINCT Pno
FROM SPJ
WHERE Sno = 'S1'
```

	Pno
1	P1
2	P2

-- (4) 找出工程项目 J2 使用的各种零件的名称及其数量;

```
SELECT Pname, QTY
FROM P, SPJ
WHERE Jno = 'J2' AND
      P.PNO = SPJ.PNO
```

	Pname	QTY
1	螺栓	100
2	螺丝刀	200
3	凸轮	100
4	齿轮	200

-- (5) 找出上海厂商供应的所有零件号码

```
SELECT DISTINCT Pno
FROM SPJ, S
WHERE S.city = '上海' AND
      SPJ.Sno = S.Sno;
```

	Pno
1	P2
2	P3
3	P6

-- (6) 找出使用上海产的零件的工程名称;

```
SELECT PNAME
FROM P
WHERE EXISTS(
  select *
  FROM S, SPJ
  WHERE P.PNO = SPJ.PNO AND
        S.city = '上海' AND
        SPJ.Sno = S.Sno
```

);

	PNAME
1	螺栓
2	螺丝刀
3	齿轮

-- (7) 找出没有使用天津产的零件的工程号码;

```
SELECT Pno
FROM P
WHERE not EXISTS(
  select *
  FROM S, SPJ
  WHERE P.PNO = SPJ.PNO AND
        S.city != '天津' AND
        SPJ.Sno = S.Sno
```

);

	Pno
1	P4

-- (8) 把全部红色零件的颜色改成蓝色;

```
UPDATE P
SET color = '蓝'
WHERE P.color = '红';
```

-- (9) 由 S5 供给 J4 的零件 P6 改为由 S3 供应, 请作必要的修改;

```
UPDATE SPJ
SET Sno = 'S3'
where Sno = 'S5' AND
      Jno = 'J4' AND
      Pno = 'P6';
```

-- (10) 从供应商关系中删除 S2 的记录, 并从供应情况关系中删除相应的记录;

```
DELETE FROM SPJ
WHERE SNO = 'S2';
DELETE FROM S
WHERE SNO = 'S2';
```

-- (11) 请将 (S2, J6, P4, 200) 插入供应情况关系。

```
INSERT INTO SPJ
VALUES
('S2', 'J6', 'P4', 200);
```

/*

请为三建工程项目建立一个供应情况的视图，
包括供应商代码（SNO）、零件代码（PNO）、供应数量（QTY）。

针对该视图完成下列查询：

*/

```
CREATE VIEW SJ_SUPPLYINFO
```

```
as
```

```
select SNO, PNO, QTY
```

```
FROM SPJ,J
```

```
WHERE J.JNAME = '三建' and
```

```
SPJ.JNO = J.JNO;
```

```
GO
```

--（1）找出三建工程项目使用的各种零件代码及其数量；

```
SELECT PNO, QTY
```

```
From SJ_SUPPLYINFO;
```

对象	* 无标题 - 查询	SJ_SUPPLYINFO @learnsql.d...
保存	查询创建工具	美化 SQL () 代码段
MS SQLserver	learnsql	
1	SELECT PNO, QTY	
2	From SJ_SUPPLYINFO;	
3		

信息	结果 1
PNO	QTY
P1	300
P3	400
P5	400
P1	200
P3	200
P5	100
P3	200

--（2）找出供应商S1的供应情况。

```
SELECT PNO, QTY
```

```
From SJ_SUPPLYINFO
```

```
WHERE SNO = 'S1'
```

对象	* 无标题 - 查询	SJ_SUPPLYINFO @learnsql.d...
保存	查询创建工具	美化 SQL () 代码段
MS SQLserver	learnsql	dbo
1	CREATE VIEW SJ_SUPPLYINFO	
2	as	
3	select SNO, PNO, QTY	
4	FROM SPJ,J	
5	WHERE J.JNAME = '三建' and	
6	SPJ.JNO = J.JNO;	
7	GO	

信息
CREATE VIEW SJ_SUPPLYINFO
as
select SNO, PNO, QTY
FROM SPJ,J
WHERE J.JNAME = '三建' and
SPJ.JNO = J.JNO;
> OK
> 时间: 0.032s

对象	* 无标题 - 查询	SJ_SUPPLYINFO @learnsql.d...
开始事务	文本 · 筛选	排序 导出
SNO	PNO	QTY
S1	P1	300
S2	P3	400
S2	P5	400
S3	P1	200
S3	P3	200
S4	P5	100
S5	P3	200

对象	* 无标题 - 查询	SJ_SUPPLYINFO @learnsql.d...
保存	查询创建工具	美化 SQL () 代码段
MS SQLserver	learnsql	dbo
1	SELECT PNO, QTY	
2	From SJ_SUPPLYINFO	
3	WHERE SNO = 'S1'	
4		

信息	结果 1
PNO	QTY
P1	300