

# 4

```
CREATE TABLE S  
(SNO CHAR(3) PRIMARY KEY,  
 SNAME CHAR(10),  
 STATUS CHAR(2),  
 CITY ...);
```

```
CREATE TABLE P  
(PNO CHAR(3) PRIMARY KEY,  
PNAME ...,  
COLOR CHAR(4),  
WEIGHT INT);
```

```
CREATE TABLE J  
(JNO CHAR(3) PRIMARY KEY,  
  JNAME ...  
  CITY CHAR(10));
```

CREATE TABLE SPJ

(SNO CHAR(3),

PNO CHAR(3),

JNO CHAR(3),

QTY ...,

PRIMARY KEY(SNO,PNO,JNO),

FOREIGN KEY (SNO) REFERENCES S(SNO),

FOREIGN KEY (PNO) REFERENCES P(PNO),

FOREIGN KEY (JNO) REFERENCES J(...))

# 4

```
1)SELECT SNO  
   FROM SPJ  
   WHERE JNO='J1';
```

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

```
3)SELECT SNO  
FROM SPJ  
WHERE JNO='J1'  
AND PNO IN  
(SELECT PNO  
FROM P  
WHERE COLOR='...' );
```

```
3)SELECT SNO  
FROM SPJ,P  
WHERE SPJ.PNO=P.PNO  
AND SPJ.JNO='J1'  
AND P.COLOR='...' ;
```

```
4) SELECT JNO  
FROM J  
WHERE NOT EXISTS  
(SELECT * FROM SPJ,S,P  
WHERE J.JNO=SPJ.JNO  
AND SPJ.SNO=S.SNO  
AND S.CITY='...'  
AND SPJ.PNO=P.PNO  
AND P.COLOR='...' );
```



```
4) SELECT JNO FROM J
WHERE JNO NOT IN
(SELECT JNO
FROM SPJ,S,P
WHERE SPJ.SNO=S.SNO
AND S.CITY='...'
AND SPJ.PNO=P.PNO
AND P.COLOR='...' );
```

```
4)SELECT JNO FROM J
WHERE NOT EXISTS
(SELECT * FROM SPJ
WHERE SPJ.JNO=J.JNO
AND SNO IN
(SELECT SNO FROM S WHERE CITY='...' )
AND PNO IN
(SELECT PNO FROM P WHERE
COLOR='...' ));
```

注：本题也可用“差”运算的思路求解。

```
5)SELECT JNO  
FROM SPJ X  
WHERE NOT EXISTS  
(SELECT * FROM SPJ Y  
WHERE SNO='S1'  
AND NOT EXISTS  
(SELECT * FROM SPJ Z  
WHERE Z.PNO=Y.PNO  
AND Z.JNO=***.JNO));
```

```
5)SELECT JNO  
FROM J X  
WHERE NOT EXISTS  
(SELECT * FROM SPJ Y  
WHERE SNO='S1'  
AND NOT EXISTS  
(SELECT * FROM SPJ Z  
WHERE Z.PNO=Y.PNO  
AND Z.JNO=***.JNO));
```

# 5

```
6)SELECT JNAME  
FROM J,SPJ,S  
WHERE SPJ.SNO=S.SNO  
AND SPJ.JNO=J.JNO  
AND S.CITY='...' 城市名;
```

```
SELECT JNAME  
FROM J  
WHERE JNO IN  
(SELECT JNO  
FROM SPJ,S  
WHERE SPJ.SNO=S.SNO  
AND S.CITY='...' 城市名);
```

```
6)SELECT JNAME  
FROM J  
WHERE EXISTS  
(SELECT *  
FROM SPJ,S  
WHERE SPJ.SNO=S.SNO  
AND S.CITY='...' 城市名  
AND SPJ.JNO=J.JNO);
```

```
7)SELECT JNO  
FROM J  
WHERE NOT EXISTS  
(SELECT * FROM SPJ,S  
WHERE SPJ.SNO=S.SNO  
AND S.CITY='...' 城市名  
AND SPJ.JNO=J.JNO  
);
```

```
7)SELECT JNO  
FROM J  
WHERE NOT EXISTS  
(SELECT * FROM SPJ  
WHERE SPJ.JNO=J.JNO  
AND SNO IN  
(SELECT SNO FROM S  
WHERE CITY='...' ));
```



8)UPDATE P  
SET COLOR='蓝' ;

9)UPDATE SPJ  
SET SNO='S3'  
WHERE SNO='S5'  
AND JNO='J4'  
AND PNO='P6';

10)DELETE  
FROM SPJ  
WHERE SNO='S2';

DELETE  
FROM S  
WHERE SNO='...';

```
11)INSERT INTO SPJ(SNO,JNO,PNO.QTY)  
VALUES('S2','J6','P4',200);
```

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

9

```
CREATE VIEW V_SPJ AS  
SELECT SNO,PNO,QTY  
FROM SPJ  
WHERE JNO IN (  
SELECT JNO  
FROM J  
WHERE JNAME='三建' );
```

1) **SELECT** PNO,QTY  
**FROM** V\_SPJ;

或者:

**SELECT** PNO,SUM(QTY)  
**FROM** V\_SPJ  
**GROUP BY** PNO;

2) **SELECT** PNO,QTY  
**FROM** V\_SPJ  
**WHERE** SNO='...';供应商号