Table 1

create table S(`S#` char(5) not null, Sname char(20),Status smallint, city char(15));

```
mysql> desc S;
+--------+----------+------+-----+---------+-------+
| Field  | Type     | Null | Key | Default | Extra |
+--------+----------+------+-----+---------+-------+
| S#     | char(5)  | NO   |     | NULL    |       |
| Sname  | char(20) | YES  |     | NULL    |       |
| Status | smallint | YES  |     | NULL    |       |
| city   | char(15) | YES  |     | NULL    |       |
+--------+----------+------+-----+---------+-------+
4 rows in set (0.02 sec)
```

insert into S values('S1', 'Smith', 20, 'London');

insert into S values('S2', 'Janes', 21, 'Paris');

insert into S values('S3', 'Blake', 30, 'Paris');

insert into S values('S4', 'Clark', 20, 'London');

insert into S values('S4', 'Adam', 30, 'Athens');

```
mysql> insert into S values('S2', 'Janes', 21, 'Paris');
Query OK, 1 row affected (0.01 sec)

mysql> insert into S values('S3', 'Blake', 30, 'Paris');
Query OK, 1 row affected (0.00 sec)

mysql> insert into S values('S4', 'Clark', 20, 'London');
Query OK, 1 row affected (0.01 sec)

mysql> insert into S values('S4', 'Adam', 30, 'Athens');
Query OK, 1 row affected (0.00 sec)

mysql> select * from s;
+----+-------+--------+--------+
| S# | Sname | Status | city   |
+----+-------+--------+--------+
| S1 | Smith |     20 | London |
| S2 | Janes |     21 | Paris  |
| S3 | Blake |     30 | Paris  |
| S4 | Clark |     20 | London |
| S4 | Adam  |     30 | Athens |
+----+-------+--------+--------+
5 rows in set (0.00 sec)

mysql>
```

Table 2

create table P (`P#` char(6) not null, Pname char(20), Color char(6),Weight smallint, City char(15));

```
mysql> desc P;
+--------+----------+------+-----+---------+-------+
| Field  | Type     | Null | Key | Default | Extra |
+--------+----------+------+-----+---------+-------+
| P#     | char(6)  | NO   |     | NULL    |       |
| Pname  | char(20) | YES  |     | NULL    |       |
| Color  | char(6)  | YES  |     | NULL    |       |
| Weight | smallint | YES  |     | NULL    |       |
| City   | char(15) | YES  |     | NULL    |       |
+--------+----------+------+-----+---------+-------+
5 rows in set (0.00 sec)
```

insert into P values('P1', 'Nut', 'Red', 12, 'London');

insert into P values('P2', 'Bolt', Green, 17, 'Paris');

insert into P values('S3', 'Screw', Blue, 17, 'Rome');

insert into P values('P4', 'Screw', 'Red', 14, 'London');

insert into P values('P5','Cam','Blue',12,'Paris');

insert into P values('P6','Cog','Red',19,'London');

```
mysql> insert into P values('p1','Nut','Red',12,'London');
Query OK, 1 row affected (0.01 sec)

mysql> insert into P values('P2','Bolt','Green',17,'Paris');
Query OK, 1 row affected (0.04 sec)

mysql> insert into P values('P3','Screw','Blue',17,'Rome');
Query OK, 1 row affected (0.01 sec)

mysql> insert into P values('P4','Screw','Red',14,'London');
Query OK, 1 row affected (0.04 sec)

mysql> Select * from P;
+----+-------+-------+--------+--------+
| P# | Pname | Color | Weight | City   |
+----+-------+-------+--------+--------+
| p1 | Nut   | Red   |     12 | London |
| P2 | Bolt  | Green |     17 | Paris  |
| P3 | Screw | Blue  |     17 | Rome   |
| P4 | Screw | Red   |     14 | London |
+----+-------+-------+--------+--------+
4 rows in set (0.00 sec)
```

Table 3

create table J (`J#` char(4) not null, Jname char(10),City char(15));

```
mysql> desc J;
+--------+----------+------+-----+---------+-------+
| Field  | Type     | Null | Key | Default | Extra |
+--------+----------+------+-----+---------+-------+
| J#     | char(4)  | NO   |     | NULL    |       |
| Jname  | char(10) | YES  |     | NULL    |       |
| City   | char(15) | YES  |     | NULL    |       |
+--------+----------+------+-----+---------+-------+
3 rows in set (0.00 sec)
```

insert into j values('J1', 'Sorter', 'Paris');

insert into j values('J2', 'Punch', 'Rome');

insert into j values('J3', 'Reader', 'Athens');

insert into j values('J4', 'Console', 'Athens');

insert into j values('J5', 'Collator', 'London');

insert into j values('J6', 'Terminal', 'Oslo');

```
mysql> insert into j values('J1', 'Sorter', 'Paris');
Query OK, 1 row affected (0.01 sec)

mysql> insert into j values('J2', 'Punch', 'Rome');
Query OK, 1 row affected (0.01 sec)

mysql> insert into j values('J3', 'Reader', 'Athens');
Query OK, 1 row affected (0.01 sec)

mysql> insert into j values('J4', 'Console', 'Athens');
Query OK, 1 row affected (0.04 sec)

mysql> insert into j values('J5', 'Collator', 'London');
Query OK, 1 row affected (0.01 sec)

mysql> insert into j values('J6', 'Terminal', 'Oslo');
Query OK, 1 row affected (0.01 sec)
```

```
mysql> Select * from j;
+----+----------+--------+
| J# | Jname    | City   |
+----+----------+--------+
| J1 | Sorter   | Paris  |
| J2 | Punch    | Rome   |
| J3 | Reader   | Athens |
| J4 | Console  | Athens |
| J5 | Collator | London |
| J6 | Terminal | Oslo   |
+----+----------+--------+
6 rows in set (0.00 sec)
```

Table 4

create table sp (`SP#` char(4) not null, `P#` char(4) not null, `J#` char(4) not null,QTY int);

```
mysql> Desc SP;
+-------+---------+------+-----+---------+-------+
| Field | Type    | Null | Key | Default | Extra |
+-------+---------+------+-----+---------+-------+
| SP#   | char(4) | NO   |     | NULL    |       |
| P#    | char(4) | NO   |     | NULL    |       |
| J#    | char(4) | NO   |     | NULL    |       |
| QTY   | int     | YES  |     | NULL    |       |
+-------+---------+------+-----+---------+-------+
4 rows in set (0.00 sec)
```

insert into sp values('S1','P1','J1',200);

insert into sp values('S1','P1','J4',700);

insert into sp values('S2','P3','J1',400);

insert into sp values('S2','P3','J2',200);

insert into sp values('S2','P3','J3',200);

insert into sp values('S2','P3','J4',500);

insert into sp values('S2','P3','J5',600);

insert into sp values('S2','P3','J6',400);

insert into sp values('S2','P3','J7',800);

insert into sp values('S2','P5','J2',00);

insert into sp values('S3','P3','J1',200);

insert into sp values('S3','P4','J2',500);

insert into sp values('S4','P6','J3',300);

insert into sp values('S4','P6','J7',300);

insert into sp values('S5','P2','J2',200);

insert into sp values('S5','P2','J4',100);

insert into sp values('S5','P5','J5',500);

insert into sp values('S5','P5','J7',100);

insert into sp values('S5','P6','J2',200);

insert into sp values('S5','P3','J4',200);

insert into sp values('S5','P4','J4',800);

insert into sp values('S5','P5','J4',400);

insert into sp values('S5','P6','J4',500);

```
mysql> insert into sp values('S1','P1','J1',200);
Query OK, 1 row affected (0.01 sec)

mysql> insert into sp values('S1','P1','J4',700);
Query OK, 1 row affected (0.00 sec)

mysql> insert into sp values('S2','P3','J1',400);
Query OK, 1 row affected (0.01 sec)

mysql> insert into sp values('S2','P3','J2',200);
Query OK, 1 row affected (0.04 sec)

mysql> insert into sp values('S2','P3','J3',200);
Query OK, 1 row affected (0.00 sec)

mysql> insert into sp values('S2','P3','J4',500);
Query OK, 1 row affected (0.01 sec)

mysql> insert into sp values('S2','P3','J5',600);
Query OK, 1 row affected (0.04 sec)

mysql> insert into sp values('S2','P3','J6',400);
Query OK, 1 row affected (0.01 sec)

mysql> insert into sp values('S2','P3','J7',800);
Query OK, 1 row affected (0.01 sec)

mysql> insert into sp values('S2','P5','J2',00);
Query OK, 1 row affected (0.00 sec)

mysql> insert into sp values('S3','P3','J1',200);
Query OK, 1 row affected (0.01 sec)

mysql> insert into sp values('S3','P4','J2',500);
Query OK, 1 row affected (0.01 sec)

mysql> insert into sp values('S4','P6','J3',300);
Query OK, 1 row affected (0.01 sec)

mysql> insert into sp values('S4','P6','J7',300);
Query OK, 1 row affected (0.00 sec)

mysql> insert into sp values('S5','P2','J2',200);
Query OK, 1 row affected (0.01 sec)
```

```
mysql> insert into sp values('S5','P2','J4',100);
Query OK, 1 row affected (0.01 sec)

mysql> insert into sp values('S5','P5','J5',500);
Query OK, 1 row affected (0.01 sec)

mysql> insert into sp values('S5','P5','J7',100);
Query OK, 1 row affected (0.04 sec)

mysql> insert into sp values('S5','P6','J2',200);
Query OK, 1 row affected (0.01 sec)

mysql> insert into sp values('S5','P3','J4',200);
Query OK, 1 row affected (0.00 sec)

mysql> insert into sp values('S5','P4','J4',800);
Query OK, 1 row affected (0.04 sec)

mysql> insert into sp values('S5','P5','J4',400);
Query OK, 1 row affected (0.01 sec)

mysql> insert into sp values('S5','P6','J4',500);
Query OK, 1 row affected (0.04 sec)
```

```
mysql> Select * from SP;
+-----+----+----+------+
| SP# | P# | J# | QTY  |
+-----+----+----+------+
| S1  | P1 | J1 |  200 |
| S1  | P1 | J4 |  700 |
| S2  | P3 | J1 |  400 |
| S2  | P3 | J2 |  200 |
| S2  | P3 | J3 |  200 |
| S2  | P3 | J4 |  500 |
| S2  | P3 | J5 |  600 |
| S2  | P3 | J6 |  400 |
| S2  | P3 | J7 |  800 |
| S2  | P5 | J2 |    0 |
| S3  | P3 | J1 |  200 |
| S3  | P4 | J2 |  500 |
| S4  | P6 | J3 |  300 |
| S4  | P6 | J7 |  300 |
| S5  | P2 | J2 |  200 |
| S5  | P2 | J4 |  100 |
| S5  | P5 | J5 |  500 |
| S5  | P5 | J7 |  100 |
| S5  | P6 | J2 |  200 |
| S5  | P3 | J4 |  200 |
| S5  | P4 | J4 |  800 |
| S5  | P5 | J4 |  400 |
| S5  | P6 | J4 |  500 |
+-----+----+----+------+
23 rows in set (0.00 sec)
```