create database spj;

use spj;

CREATE TABLE S (`S#` CHAR(5) NOT NULL, Sname CHAR(20),status SMALLINT, cityCHAR(15));

desc s;

```
 char(4) not null,`P#` char(4) not null,J
create table sp(`S#` char(4) not null' at line 1
mysql> create table sp(`S#` char(4) not null,`P#` char(4) not null,`J#` char not null,qty int);
Query OK, 0 rows affected (0.04 sec)

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 (0.01 sec)

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   | varchar(15) | YES  |     | NULL    |       |
+--------+-------------+------+-----+---------+-------+
5 rows in set (0.01 sec)

mysql> desc sp;
+-------+---------+------+-----+---------+-------+
| Field | Type    | Null | Key | Default | Extra |
+-------+---------+------+-----+---------+-------+
| S#    | char(4) | NO   |     | NULL    |       |
| P#    | char(4) | NO   |     | NULL    |       |
| J#    | char(1) | NO   |     | NULL    |       |
| qty   | int     | YES  |     | NULL    |       |
+-------+---------+------+-----+---------+-------+
4 rows in set (0.00 sec)

mysql> insert into sp values("S1","P1","J1",200);
ERROR 1406 (22001): Data too long for column 'J#' at row 1
```

show tables;

```
mysql> show tables;
+---------------+
| Tables_in_spj |
+---------------+
| s             |
+---------------+
1 row in set (0.00 sec)
```

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

insert into S values("S2","Jones",10,"Paris");

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

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

insert into S values("S5","Adams",30,"Athens");

select * from S;

```
mysql> select * from S;
+----+-------+--------+--------+
| S# | Sname | status | city   |
+----+-------+--------+--------+
| S1 | Smith |     20 | London |
| S2 | Jones |     10 | Paris  |
| S3 | Blake |     30 | Paris  |
| S4 | Blake |     20 | London |
| S5 | Adams |     30 | Athens |
| S4 | Clark |     20 | London |
+----+-------+--------+--------+
6 rows in set (0.00 sec)
```

create table P(`P#` char(6) not null,pname char(20),color char(6),weight smallint,city varchar(15));

desc p;


```
 char(4) not null,`P#` char(4) not null,J
create table sp(`S#` char(4) not null' at line 1
mysql> create table sp(`S#` char(4) not null,`P#` char(4) not null,`J#` char not null,qty int);
Query OK, 0 rows affected (0.04 sec)

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 (0.01 sec)

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   | varchar(15) | YES  |     | NULL    |       |
+--------+-------------+------+-----+---------+-------+
5 rows in set (0.01 sec)

mysql> desc sp;
+-------+---------+------+-----+---------+-------+
| Field | Type    | Null | Key | Default | Extra |
+-------+---------+------+-----+---------+-------+
| S#    | char(4) | NO   |     | NULL    |       |
| P#    | char(4) | NO   |     | NULL    |       |
| J#    | char(1) | NO   |     | NULL    |       |
| qty   | int     | YES  |     | NULL    |       |
+-------+---------+------+-----+---------+-------+
4 rows in set (0.00 sec)

mysql> insert into sp values("S1","P1","J1",200);
ERROR 1406 (22001): Data too long for column 'J#' at row 1
```

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

insert into P values("P2","bolt","Green",17,"Paris");

insert into P values("P3","cam","blue",19,"Paris");

insert into P values("P4","cog","Red",17,"London");

insert into P values("P5","screw","blue",17,"rom");

insert into P values("P6","screw","Red",1,"London");

select * from P;


```
mysql> select * from P;
+----+-------+-------+--------+--------+
| P# | pname | color | weight | city   |
+----+-------+-------+--------+--------+
| P1 | Nut   | Red   |     12 | London |
| P2 | bolt  | Green |     17 | Paris  |
| P3 | cam   | blue  |     19 | Paris  |
| P4 | cog   | Red   |     17 | London |
| P5 | screw | blue  |     17 | rom    |
| P6 | screw | Red   |      1 | London |
+----+-------+-------+--------+--------+
6 rows in set (0.00 sec)
```

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

desc j;

```
| S2 | P5 | J2 |  100 |
| 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 | J7 |  200 |
| S5 | P6 | J2 |  200 |
| S5 | P1 | J4 |  100 |
| S5 | P3 | J4 |  200 |
| S5 | P4 | J4 |  800 |
| S5 | P5 | J4 |  400 |
| S5 | P6 | J4 |  500 |
+----+----+----+------+
26 rows in set (0.00 sec)

mysql> desc sp;
+-------+---------+------+-----+---------+-------+
| Field | Type    | Null | Key | Default | Extra |
+-------+---------+------+-----+---------+-------+
| S#    | 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)

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)

mysql>
```

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

insert into j values("J2","Punch","rom");

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");

insert into j values("J7","Tape","London");

select * from j;

```
   ">  ';
   ">  "
   ->  insert into j values("J7","Tape","London");
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near 'T
ape","London");
   ';
"
 insert into j values("J7","Tape","London")' at line 1
mysql>  insert into j values("J7","Tape","London");
Query OK, 1 row affected (0.01 sec)

mysql> select * from j;
+----+----------+--------+
| j# | Jname    | City   |
+----+----------+--------+
| J1 | Sorter   | Paris  |
| J2 | Punch    | rom    |
| J3 | Reader   | Athens |
| J4 | Console  | Athens |
| J5 | Collator | London |
| J6 | Terminal | Oslo   |
| J7 | Tape     | London |
+----+----------+--------+
7 rows in set (0.00 sec)

mysql> create table sp(`S#`, char(4) not null,`P#` char(4) not null,J# char not null,qty int);
   -> create table sp(`S#` char(4) not null,`P#` char(4) not null,J# char not null,qty int);;
   -> create table sp(`S#` char(4) not null,`P#` char(4) not null,J# char not null,qty int);
   -> '
   -> create table sp(`S#` char(4) not null,`P#` char(4) not null,`J#` char not null,qty int);
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near ',
 char(4) not null,`P#` char(4) not null,J
create table sp(`S#` char(4) not null' at line 1
mysql> create table sp(`S#` char(4) not null,`P#` char(4) not null,`J#` char not null,qty int);
Query OK, 0 rows affected (0.04 sec)

mysql> desc s;
+-------+----------+------+-----+---------+-------+
| Field | Type     | Null | Key | Default | Extra |
+-------+----------+------+-----+---------+-------+
| S#    | char(5)  | NO   |     | NULL    |       |
```

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

desc sp;


```
| 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 | P3 | J7 |  800 |
| S2 | P5 | J2 |  100 |
| 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 | J7 |  200 |
| S5 | P6 | J2 |  200 |
| S5 | P1 | J4 |  100 |
| S5 | P3 | J4 |  200 |
| S5 | P4 | J4 |  800 |
| S5 | P5 | J4 |  400 |
| S5 | P6 | J4 |  500 |
+----+----+----+------+
26 rows in set (0.00 sec)

mysql> desc sp;
+-------+---------+------+-----+---------+-------+
| Field | Type    | Null | Key | Default | Extra |
+-------+---------+------+-----+---------+-------+
| S#    | 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)

mysql>
```

select * from sp;


```
mysql> insert into sp values("S5","P6","J4",500);
Query OK, 1 row affected (0.01 sec)

mysql> select * from sp;
+----+----+----+------+
| S# | 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 | P3 | J7 |  800 |
| S2 | P5 | J2 |  100 |
| 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 | J7 |  200 |
| S5 | P6 | J2 |  200 |
| S5 | P1 | J4 |  100 |
| S5 | P3 | J4 |  200 |
| S5 | P4 | J4 |  800 |
| S5 | P5 | J4 |  400 |
| S5 | P6 | J4 |  500 |
+----+----+----+------+
26 rows in set (0.00 sec)

mysql> desc sp;
+-------+---------+------+-----+---------+-------+
| Field | Type    | Null | Key | Default | Extra |
+-------+---------+------+-----+---------+-------+
| S#    | char(4) | NO   |     | NULL    |       |
```