Assignment -5

1.Display the Supplier name and the Quantity sold.

Foreign key:

```
cdac=# select distinct s.s_name,spj.quantity from s,spj where s.s_id=spj.sno;
 s_name | quantity
--------+----------
 Jones  |      600
 Jones  |      100
 Jones  |      400
 Smith  |      700
 Adams  |      100
 Blake  |      500
 Adams  |      800
 Adams  |      200
 Jones  |      500
 Adams  |      400
 Clark  |      300
 Jones  |      800
 Smith  |      200
 Blake  |      200
 Jones  |      200
 Adams  |      500
(16 rows)
```

Group by:

```
cdac=# select s.s_name,spj.quantity from s,spj where s.s_id=spj.sno group by s.s_name,spj.quantity;
 s_name | quantity
--------+----------
 Jones  |      600
 Jones  |      100
 Jones  |      400
 Smith  |      700
 Adams  |      100
 Blake  |      500
 Adams  |      800
 Adams  |      200
 Jones  |      500
 Adams  |      400
 Clark  |      300
 Jones  |      800
 Smith  |      200
 Blake  |      200
 Jones  |      200
 Adams  |      500
(16 rows)
```

******** if total quantity not requires just remove sum fro following query

Using Join take sum of quantity:

```
cdac=# select s2.s_name, sum(s1.quantity) from spj s1 join s s2 on s2.s_id=s1.sno group by s2.s_name;
 s_name | sum
--------+------
 Blake  |  700
 Jones  | 3200
 Smith  |  900
 Clark  |  600
 Adams  | 2600
(5 rows)
```

2. Display the Part name and Quantity sold.

```
cdac=# select p.pname,spj.quantity from p,spj where p.pno=spj.pno;
 pname | quantity
-------+----------
 Nut   |      200
 Nut   |      700
 skrew |      400
 skrew |      200
 skrew |      200
 skrew |      500
 skrew |      600
 skrew |      400
 skrew |      800
 Cam   |      100
 skrew |      200
 skrew |      500
 Cog   |      300
 Cog   |      300
 Bolt  |      200
 Bolt  |      100
 Cam   |      500
 Cam   |      100
 Cog   |      200
 Nut   |      100
 skrew |      200
 skrew |      800
 Cam   |      400
(23 rows)
```

I***if total quantity not requires just remove sum from following query

Using Join take sum of quantity:

```
cdac=# select p1.pname,sum(s1.quantity) from spj s1 join p p1 on p1.PNO=s1.pno group by p1.pname;
 pname | sum
-------+------
 Cog   |  800
 skrew | 4800
 Bolt  |  300
 Cam   | 1100
 Nut   | 1000
(5 rows)
```

3. Display the Project name and Quantity sold.

```
cdac=# select j.jname,spj.quantity from j,spj where j.jno=spj.jno;
 jname   | quantity
---------+----------
 Sorter  |      200
 Console |      700
 Sorter  |      400
 Display |      200
 OCR     |      200
 Console |      500
 RAID    |      600
 EDS     |      400
 ARP     |      800
 Display |      100
 Sorter  |      200
 Display |      500
 OCR     |      300
 ARP     |      300
 Display |      200
 Console |      100
 RAID    |      500
 ARP     |      100
 Display |      200
 Console |      100
 Console |      200
 Console |      800
 Console |      400
(23 rows)
```

I***if total quantity not requires just remove sum from following query

Using Join take sum of quantity:

```
cdac=# select j1.jname,sum(s1.quantity) from spj s1 join J j1 on j1.JNO=s1.jno group by j1.jname;
 jname   | sum
---------+------
 Display | 1200
 EDS     |  400
 ARP     | 1200
 RAID    | 1100
 OCR     |  500
 Sorter  |  800
 Console | 2800
(7 rows)
```

4. Display the Supplier name, Part name, Project name and Quantity sold.

Using forien key:

```
cdac=# select s.s_name,p.pname,j.jname,spj.quantity from s,p,j,spj where s.s_id=spj.sno and p.pno=spj.pno and j.jno=spj.jno;
 s_name | pname | jname   | quantity
--------+-------+---------+----------
 Smith  | Nut   | Sorter  |      200
 Smith  | Nut   | Console |      700
 Jones  | skrew | Sorter  |      400
 Jones  | skrew | Display |      200
 Jones  | skrew | OCR     |      200
 Jones  | skrew | Console |      500
 Jones  | skrew | RAID    |      600
 Jones  | skrew | EDS     |      400
 Jones  | skrew | ARP     |      800
 Jones  | Cam   | Display |      100
 Blake  | skrew | Sorter  |      200
 Blake  | skrew | Display |      500
 Clark  | Cog   | OCR     |      300
 Clark  | Cog   | ARP     |      300
 Adams  | Bolt  | Display |      200
 Adams  | Bolt  | Console |      100
 Adams  | Cam   | RAID    |      500
 Adams  | Cam   | ARP     |      100
 Adams  | Cog   | Display |      200
 Adams  | Nut   | Console |      100
 Adams  | skrew | Console |      200
 Adams  | skrew | Console |      800
 Adams  | Cam   | Console |      400
(23 rows)
```

```
cdac=# select s.s_name,p.pname,j.jname,sum(s1.quantity) from spj s1 join s on s.s_id=s1.sno join p on p.pno=s1.pno join J on j.jno=s1.
jno group by s.s_name,j.jname,p.pname;
 s_name | pname |  jname  | sum
--------+-------+---------+------
 Jones  | skrew | OCR     |  200
 Jones  | skrew | Console |  500
 Jones  | skrew | RAID    |  600
 Jones  | skrew | ARP     |  800
 Adams  | Cam   | ARP     |  100
 Clark  | Cog   | OCR     |  300
 Adams  | Nut   | Console |  100
 Blake  | skrew | Sorter  |  200
 Smith  | Nut   | Console |  700
 Jones  | Cam   | Display |  100
 Jones  | skrew | Display |  200
 Blake  | skrew | Display |  500
 Clark  | Cog   | ARP     |  300
 Adams  | Cam   | Console |  400
 Adams  | skrew | Console | 1000
 Adams  | Bolt  | Console |  100
 Jones  | skrew | EDS     |  400
 Adams  | Cog   | Display |  200
 Adams  | Cam   | RAID    |  500
 Adams  | Bolt  | Display |  200
 Smith  | Nut   | Sorter  |  200
 Jones  | skrew | Sorter  |  400
(22 rows)
```

5. Display the Supplier name, Supplying Parts to a Project in the same City.

```
cdac=# select s.s_name,p.pname,j.jname,j.city from s,p,j where s.city=j.city and p.city=j.city;
 s_name | pname | jname  |  city
--------+-------+--------+--------
 Blake  | Bolt  | Sorter | Paris
 Blake  | Cam   | Sorter | Paris
 Jones  | Bolt  | Sorter | Paris
 Jones  | Cam   | Sorter | Paris
 Clark  | Nut   | RAID   | London
 Clark  | skrew | RAID   | London
 Clark  | Cog   | RAID   | London
 Smith  | Nut   | RAID   | London
 Smith  | skrew | RAID   | London
 Smith  | Cog   | RAID   | London
 Clark  | Nut   | ARP    | London
 Clark  | skrew | ARP    | London
 Clark  | Cog   | ARP    | London
 Smith  | Nut   | ARP    | London
 Smith  | skrew | ARP    | London
 Smith  | Cog   | ARP    | London
(16 rows)
```

6. Display the Part name that is 'Red' is color, and the Quantity sold.

```
cdac=# select p.pname,p.color,spj.quantity from p,spj where p.pno=spj.pno and  upper(p.color)='RED';
 pname | color | quantity
-------+-------+----------
 Nut   | Red   |      200
 Nut   | Red   |      700
 skrew | red   |      500
 Cog   | Red   |      300
 Cog   | Red   |      300
 Cog   | Red   |      200
 Nut   | Red   |      100
 skrew | red   |      800
(8 rows)
```

7. Display all the Quantity sold by Suppliers with the Status = 20.

```
cdac=# select s.s_name,spj.quantity  from s, spj where s.s_id=spj.sno and status=20;
 s_name | quantity
--------+----------
 Smith  |      200
 Smith  |      700
 Clark  |      300
 Clark  |      300
(4 rows)
```

8. Display all the Parts and Quantity with a Weight > 14.

```
cdac=# select p.pname,p.weight,spj.quantity from p, spj where p.pno=spj.pno and weight >14;
 pname  | weight | quantity
--------+--------+----------
 skrew  |     17 |      400
 skrew  |     17 |      200
 skrew  |     17 |      200
 skrew  |     17 |      500
 skrew  |     17 |      600
 skrew  |     17 |      400
 skrew  |     17 |      800
 skrew  |     17 |      200
 Cog    |     19 |      300
 Cog    |     19 |      300
 Bolt   |     17 |      200
 Bolt   |     17 |      100
 Cog    |     19 |      200
 skrew  |     17 |      200
(14 rows)
```

9. Display all the Project names and City, which has bought more than 500 Parts.

```
cdac=# select j.jname,j.city, spj.quantity from j, spj where j.jno=spj.jno and spj.quantity >500;
 jname   |  city  | quantity
---------+--------+----------
 Console | Athens |      700
 RAID    | London |      600
 ARP     | London |      800
 Console | Athens |      800
(4 rows)
```

10. Display all the Part names and Quantity sold that have a Weight less than 15.

```
cdac=# select p.pname,p.weight, spj.quantity from p, spj where p.pno=spj.pno and p.weight <15;
 pname  | weight | quantity
--------+--------+----------
 Nut    |     12 |      200
 Nut    |     12 |      700
 Cam    |     12 |      100
 skrew  |     14 |      500
 Cam    |     12 |      500
 Cam    |     12 |      100
 Nut    |     12 |      100
 skrew  |     14 |      800
 Cam    |     12 |      400
(9 rows)
```