

#### Assignment-4

1. Display the minimum Status in the Supplier table.

```
cdac=# select min(status) from s;
min
-----
 10
(1 row)
```

2. Display the maximum Weight in the Parts table.

```
cdac=# select max(weight) from P;
max
-----
 19
(1 row)
```

3. Display the average Weight of the Parts.

```
cdac=# select avg(status) from s;
avg
-----
22.000000000000000000
(1 row)
```

4. Display the total Quantity sold for part 'P1'.

```
cdac=# select sum(quantity) from spj where pno='P1';
sum
-----
1000
(1 row)
```

```
cdac=# select sum(quantity),p1.PNO from SPJ s1 join P p1 on s1.PNO=p1.PNO where p1.PNO='P1' group by p1.PNO;;
sum | pno
-----+-----
1000 | P1
(1 row)
```

5. Display the total Quantity sold for each part.

```
cdac=# select distinct pno,sum(quantity) from spj group by pno;
 pno | sum
-----+-----
 P1  | 1000
 p3  | 3500
 P2  | 300
 P5  | 1100
 p4  | 1300
 P6  | 800
(6 rows)
```

```
cdac=# select sum(quantity),p1.PNO from SPJ s1 join P p1 on s1.PNO=p1.PNO group by p1.PNO;
 sum | pno
-----+-----
 800 | P6
1100 | P5
 300 | P2
3500 | p3
1300 | p4
1000 | P1
(6 rows)
```

6. Display the average Quantity sold for each part.

```
cdac=# select avg(quantity),p1.PNO from SPJ s1 join P p1 on s1.PNO=p1.PNO group by p1.PNO;
      avg      | pno
-----+-----
266.66666666666667 | P6
275.00000000000000 | P5
150.00000000000000 | P2
388.88888888888889 | p3
650.00000000000000 | p4
333.33333333333333 | P1
(6 rows)
```

7. Display the maximum Quantity sold for each part, provided the maximum Quantity is greater than 800.

```
cdac=# select max(quantity) from spj group by pno having max(quantity)>800;
 max
-----
(0 rows)

cdac=# select max(quantity) from spj group by pno having max(quantity)>=800;
 max
-----
 800
 800
(2 rows)
```

```
cdac=# select max(quantity),p1.PNO from SPJ s1 join P p1 on s1.PNO=p1.PNO where s1.quantity >800 group by p1.PNO;
max | pno
-----+-----
(0 rows)

cdac=# select max(quantity),p1.PNO from SPJ s1 join P p1 on s1.PNO=p1.PNO where s1.quantity >=800 group by p1.PNO;
max | pno
-----+-----
800 | p3
800 | p4
(2 rows)
```

8. Display the Status and the count of Suppliers with that Status.

```
cdac=# select * from s;
s_id | s_name | status | city
-----+-----+-----+-----
S1   | Smith  | 20     | London
S2   | Jones  | 10     | Paris
S3   | Blake  | 30     | Paris
S4   | Clark  | 20     | London
S5   | Adams  | 30     | Athens
(5 rows)

cdac=# select status ,count (s_name) as no_of_suppliers from s group by status;
status | no_of_suppliers
-----+-----
30     | 2
10     | 1
20     | 2
(3 rows)
```

9. Display the count of Projects going on in different cities.

```
cdac=# select * from J;
jno | jname | city
-----+-----+-----
J1   | Sorter | Paris
J2   | Display | Rome
J3   | OCR    | Athens
J4   | Console | Athens
J5   | RAID   | London
J6   | EDS    | Oslo
J7   | ARP    | London
(7 rows)

cdac=# select city,count(jname) as no_of_project_allocated from J group by city;
city | no_of_project_allocated
-----+-----
Rome | 1
Oslo | 1
Paris | 1
London | 2
Athens | 2
(5 rows)
```

10. What is the difference between COUNT(Status) and COUNT(\*) ?

```
cdac=# select count(status) from s;
count
-----
      5
(1 row)
```

```
cdac=# select count(*) from s;
count
-----
      5
(1 row)
```

Count(\*) count all rows including null, but count(columnname) count only no null.

11. Display the Status and the Count of Suppliers with that Status in the following format

as shown below:-

Status Count

Ten 1

Twenty 2

Thirty 3