

SQL(join, group by and having clause)

Order by clause: we can display the content increasing as well as decreasing

* shows all the values

```
select * from dept order by dname; #order by clause here * output data
```

```
select * from dept order by dname desc; #here desc means decreasing department will be shown in decreasing order
```

```
select name from students order by name;
```

```
select name from students order by name desc;
```

```
select * from students order by name desc;
```

```
select * from students, dept;
```

```
select * from students, dept where students.deptno=dept.deptno;
```

Join: in a query we are retrieving the data from multiple table then we have to join the table.

If joined two tables each row of one table is joined with row of another table

But here it is multiplying a row with each row of another table so, it is nothing but Cartesian product

But join multiplies with only one row with same dept no.

```
select * from students join dept students.deptno=dept.deptno;# joining
```

```
select * from students S join dept D on S.deptno=D.deptno; # this is called renaming short method for joining
```

```
select *  
from students S,dept D  
where S.deptno=D.deptno;
```

```
select city from students group by city;# from clause
```

```
select count(*),city from students group by city;# grouping rows and also counting the number of students this is called as aggregate function
```

Having: shows which are having 2 or more count.

It is grouping the record by city but it can't show whole data

```
select count(*),city from students group by city having count(*)>2;
```