

---sum()

Q.-Get marks in maths achieved by section A?

```
select sum(maths) as  
total_maths_marks from  
college_data  
where Section='a';
```

Q.-total marks in (phys,che,maths) achieved by each student ?

```
select name,  
(physics+chemistry+maths) as  
total_marks from college_data;
```

---min()

Q.-which student got min in maths among boys?

```
select min(maths) as min_maths  
from college_data  
where gender='male';
```

---max()

Q.-which student got max in maths & physics combined?

```
select max(maths+physics) as  
max_marks_combined from  
college_data;
```

---Count()

Q.-Count total people in the table?

```
select count(gender) from  
college_data;
```

```
select count(*) from college_data;
```

**Q.-count no. of people scored 61
in physics?**

```
select count(*) from college_data  
where Physics=61;
```

**Q.-count how many section are
there?**

```
select count(distinct Section) from  
college_data;
```

---group by clause

- **-The "GROUP BY" clause in SQL
is used to organize rows of data**

with similar values in one or more columns together.

- -It is often paired with aggregate functions to perform calculations on these grouped sets of data.**
- -Single Grouping**

Q.-Get the min in maths from boys students?

```
select max(maths) as  
Max_Maths_Male from  
college_data
```

```
where gender = 'Male';
```

Q.-Get the max in maths from girls students?

```
select max(maths) as  
Max_Maths_Female from  
college_data
```

```
where gender = 'Female';
```

**--I want to show both together--ie
Max score in Maths by both the
gender-- How?**

--For that we need Group By

```
Select Gender,Max(Maths) AS  
Max_Maths from College_Data  
Group By Gender;
```

**Q.--Count no. of males and female
students?**

```
select gender,count(*) AS  
Total_Candidates from
```

college_data

Group By Gender;

Q.--Get the max in maths from each class?

select class,Max(Maths) AS
Max_Maths from college_data

Group By class

Order By Class DESC;

Q.-Count the no. of students from each class?

select class,count(*) AS
Total_Student from college_data
group by class;

Q.-Get the max of Maths+Science for each class?

```
select class, max(maths+physics)  
AS Maths_Physics from  
college_data
```

Group By class

Order By Class DESC;

**Q.-Get the average of
Maths,Physics,Chemistry scores
for each class?**

```
Select Class,  
Avg((maths+physics+chemistry)/3)  
AS Avg_Of_All_Subject from  
college_data
```

Group By Class;

- **-Multiple Grouping--**

Q.-Get the max in maths from each class & section?

```
select Class,Section,Max(Maths)
AS Max_Maths FROM College_Data
Group By Class,Section
Order by Class,Section;
```