

```
csc343h-dianehe=> select * from runnymede;
 name | age | grade
-----+-----+-----
diane |    |     8
will  |    |     8
cate  |    |     1
tom   |    |
micah |    |     1
grace |    |     2
(6 rows)
```

```
-- When we aggregate on a column, nulls in that column are ignored.
-- But count(*) counts tuples, and it includes every one, regardless of any nulls.
```

```
csc343h-dianehe=> select min(grade), max(grade), sum(grade), avg(grade), count(grade), count(*)
csc343h-dianehe-> from runnymede ;
```

```
 min | max | sum |          avg          | count | count
-----+-----+-----+-----+-----+-----
   1 |   8 |  20 | 4.0000000000000000 |     5 |     6
(1 row)
```

```
-- What if every value is null in the column we're aggregating on?
-- postgresSQL reports null when it hasn't a clue (i.e., for min, max, sum and avg).
-- count(*) can still give the same answer as before.
-- count(age) gives 0 because none are non-null.
```

```
csc343h-dianehe=> select min(age), max(age), sum(age), avg(age), count(age), count(*)
csc343h-dianehe-> from runnymede;
```

```
 min | max | sum | avg | count | count
-----+-----+-----+-----+-----+-----
    |    |    |    |     0 |     6
(1 row)
```

```
-- Remember that select is the last thing done. Here we prune rows *before*
-- computing the aggregations.
```

```
csc343h-dianehe=> select min(grade), max(grade), sum(grade), avg(grade), count(grade), count(*)
csc343h-dianehe-> from runnymede
csc343h-dianehe-> where name > 'cate';
```

```
 min | max | sum |          avg          | count | count
-----+-----+-----+-----+-----+-----
   1 |   8 |  19 | 4.7500000000000000 |     4 |     5
(1 row)
```