

COUNT

You can COUNT the number of rows in a table (slow on big tables):

```
SELECT COUNT(*) FROM films;
```

Counting a particular column will not take into account NULL values

```
SELECT COUNT(email) FROM customer;
```

You can COUNT with DISTINCT:

```
SELECT COUNT(DISTINCT lastname) FROM customer;
```

SUM

SUM adds together the values of a certain column

```
/* Total income from renting movies */  
SELECT SUM(amount) FROM payment;
```

```
/* Replacement cost (if one copy per film) */  
SELECT SUM(replacement_cost) FROM film;
```

Aggregation can be done grouping by common values in certain columns

```
/* How many copies of each movie we have */
```

```
SELECT film_id, COUNT(inventory_id)
```

```
FROM inventory
```

```
GROUP BY film_id
```

```
ORDER BY film_id;
```

```
/* Number of rentals for each customer */
```

```
SELECT customer_id, COUNT(rental_id)
```

```
FROM rental
```

```
GROUP BY customer_id;
```

What if you need to filter the aggregated values?

```
SELECT film_id, COUNT(inventory_id)
FROM inventory
GROUP BY film_id
HAVING COUNT(inventory_id) < 10
ORDER BY film_id;
```