

# SQL Aggregations

# Aggregate functions

Function	Description
COUNT	Count of the column specified (includes NULL values if * is used)
MAX	Maximum value in the column (excludes NULL values)
MIN	Minimum value in the column (excludes NULL values)
AVG	Average value in the column (excludes NULL values, only works on numeric data types)
SUM	Sum of values in the column (excludes NULL values, only works on numeric data types)

# Aggregations

	id [PK] integer	title text	author text	genre text	year integer
1	1	Frankenstein	Mary Shelley	Novel	1818
2	2	The Great Gatsby	F. Scott Fitzgerald	Novel	1925
3	3	Big Fish	Daniel Wallace	Magical Realism	1998
4	4	Don Quixote	Miguel de Cervantes	Novel	1605








“Count of all books”

```
SELECT COUNT(*)
AS book_count
FROM books;
```



	book_count bigint
1	4


# Aggregations

	 id [PK] integer 	 title text	 author text	 genre text	 year integer 
1	1	Frankenstein	Mary Shelley	Novel	1818
2	2	The Great Gatsby	F. Scott Fitzgerald	Novel	1925
3	3	Big Fish	Daniel Wallace	Magical Realism	1998
4	4	Don Quixote	Miguel de Cervantes	Novel	1605

“Year of the oldest book”

```
SELECT MIN(b.year)  
AS year_of_oldest_book  
FROM books b;
```



	year_of_oldest_book integer 
1	1605

# DISTINCT qualifier

	<b>id</b> [PK] integer	<b>title</b> text	<b>author</b> text	<b>genre</b> text	<b>year</b> integer
1	1	Frankenstein	Mary Shelley	Novel	1818
2	2	The Great Gatsby	F. Scott Fitzgerald	Novel	1925
3	3	Big Fish	Daniel Wallace	Magical Realism	1998
4	4	Don Quixote	Miguel de Cervantes	Novel	1605

~~"Number of book genres"~~

~~`SELECT COUNT (genre)  
AS genre_count  
FROM books;`~~



	<b>genre_count</b> bigint
1	4

# DISTINCT qualifier

	id [PK] integer	title text	author text	genre text	year integer
1	1	Frankenstein	Mary Shelley	Novel	1818
2	2	The Great Gatsby	F. Scott Fitzgerald	Novel	1925
3	3	Big Fish	Daniel Wallace	Magical Realism	1998
4	4	Don Quixote	Miguel de Cervantes	Novel	1605

“Number of book genres”

```
SELECT COUNT(DISTINCT genre)
AS genre_count
FROM books;
```



	genre_count bigint
1	2