



# SQL Conditional Expressions:

## Part 1

Provides a way to filter result sets

	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



## Example

```
SELECT title, author FROM books WHERE genre = 'Novel';
```

	title text	author text
1	Frankenstein	Mary Shelley
2	The Great Gatsby	F. Scott Fitzgerald
3	Don Quixote	Miguel de Cervantes

# Logical operators

Conditional expressions can be chained together with logical operators (e.g AND, OR)

	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

## Example

```
SELECT title, author, year
FROM books
```

```
WHERE genre = 'Novel' AND year < 1900;
```

	title text	author text	year integer
1	Frankenstein	Mary Shelley	1818
2	Don Quixote	Miguel de Cervantes	1605

# Comparison and logical operators

Operator	Description
=	Equal
>	Greater than
<	Less than
>=	Greater than or equal
<=	Less than or equal
<> or !=	Not equal
AND	Logical operator AND
OR	Logical operator OR
IN	Return true if a value matches any value in a list
BETWEEN	Return true if a value is between a range of values
LIKE	Return true if a value matches a pattern
IS NULL	Return true if a value is NULL
NOT	Negate the result of other operators

More ways to filter data

Many use Python syntax (e.g. >, >=, AND, OR)

Some syntax found in tools like Excel (e.g. <>)

Eliminates duplicate rows from the result set

```
SELECT genre FROM books;
```



	genre text	🔒
1	Novel	
2	Novel	
3	Magical Realism	
4	Novel	

	id [PK] integer	title text	author text	genre text	year integer
1	1	Frankenstein	Mary Shelley	Novel	1818
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3	3	Big Fish	Daniel Wallace	Magical Realism	1998
4	4	Don Quixote	Miguel de Cervantes	Novel	1605

```
SELECT DISTINCT genre FROM books;
```



	genre text	🔒
1	Novel	
2	Magical Realism	

Caps result set at specified number of rows

	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

**SELECT DISTINCT** genre **FROM** books;



	genre text
1	Novel
2	Magical Realism

**SELECT DISTINCT** genre  
**FROM** books **LIMIT** 1;



	genre text
1	Novel