MySQL String Functions

But First...A Helpful Tip

Running SQL files

source file_name.sql

CONCAT

Combine Data For Cleaner Output

```
author fname | author lname
             Lahiri
Jhumpa
Neil
            | Gaiman
Neil
            Gaiman
Jhumpa
            Lahiri
Dave
             Eggers
Dave
            | Eggers
Michael
            | Chabon
             Smith
Patti
Dave
             Eggers
             Gaiman
Neil
Raymond
            Carver
Raymond
            Carver
             DeLillo
Don
John
             Steinbeck
David
            | Foster Wallace
David
            Foster Wallace
             Smith
Adam
```

What if I want full names?



CONCAT (x,y,z)

CONCAT (column, anotherColumn)

CONCAT (author_fname, author_lname)

DaveEggers

JhumpaLahiri

CONCAT(column, 'text', anotherColumn, 'more text')

```
CONCAT (author_fname, ' ', author_lname)
```

Dave Eggers

Jhumpa Lahiri

```
SELECT
   CONCAT(author_fname, ' ', author_lname)
FROM books;
```

CONCAT_WS

Concat With Separator

SUBSTRING

Work With Parts Of Strings

```
SELECT SUBSTRING('Hello World', 1, 4);
```

Hell

SELECT SUBSTRING('Hello World', 7);

World

```
SELECT SUBSTRING('Hello World', -3);
```

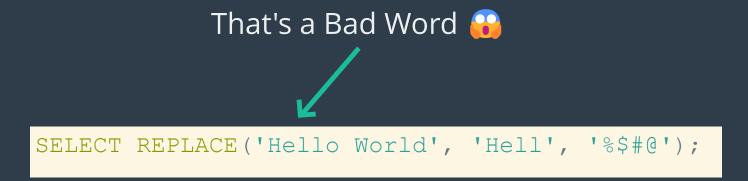
rld

SUBSTR() also works

If SUBSTRING is just too much typing for you

```
short title
The Namesa...
Norse Myth...
American G...
Interprete...
A Hologram...
The Circle...
The Amazin...
Just Kids...
A Heartbre...
Coraline...
What We Ta...
Where I'm ...
White Nois...
Cannery Ro...
Oblivion: ...
Consider t...
```

REPLACE Replace parts of strings



%\$#@o World

```
SELECT
   REPLACE('cheese bread coffee milk', ' ', ' and ');
```

cheese and bread and coffee and milk

REVERSE Super Straightforward!

SELECT REVERSE('Hello World');

dlroW olleH

That's Pretty Much It....

CHAR_LENGTH Counts Characters in String

SELECT CHAR_LENGTH('Hello World');

UPPER() and LOWER() Change A String's Case

SELECT UPPER('Hello World');

HELLO WORLD

SELECT LOWER ('Hello World');

hello world



String Function

Exercises! Exercises!

Reverse and Uppercase the following sentence

"Why does my cat look at me with such hatred?"

What Does This Print Out?

```
SELECT
    REPLACE
    (
    CONCAT('I', ' ', 'like', ' ', 'cats'),
    ' ',
    '-'
    );
```

Replace spaces in titles with '->'

```
title
The->Namesake
Norse->Mythology
American->Gods
Interpreter->of->Maladies
A->Hologram->for->the->King:->A->Novel
The->Circle
The->Amazing->Adventures->of->Kavalier->&->Clay
Just->Kids
A->Heartbreaking->Work->of->Staggering->Genius:
Coraline
What->We->Talk->About->When->We->Talk->About->Love:->Stories
Where->I'm->Calling->From:->Selected->Stories
White->Noise
Cannery->Row
Oblivion:->Stories
Consider->the->Lobster
```

Print This Out

+-	+	+
	forwards	backwards
+-	+	+
-	Lahiri	irihaL
	Gaiman	namiaG
	Gaiman	namiaG
	Lahiri	irihaL
	Eggers	sreggE
	Eggers	sreggE
	Chabon	nobahC
	Smith	htimS
	Eggers	sreggE
	Gaiman	namiaG
	Carver	revraC
	Carver	revraC
	DeLillo	olliLeD
	Steinbeck	kcebnietS
	Foster Wallace	ecallaW retsoF
	Foster Wallace	ecallaW retsoF
	Smith	htimS
+-	+	+

You Know What To Do!

```
full name in caps
JHUMPA LAHIRI
NEIL GAIMAN
NEIL GAIMAN
JHUMPA LAHIRI
DAVE EGGERS
DAVE EGGERS
MICHAEL CHABON
PATTI SMITH
DAVE EGGERS
NEIL GAIMAN
RAYMOND CARVER
RAYMOND CARVER
DON DELILLO
JOHN STEINBECK
DAVID FOSTER WALLACE
DAVID FOSTER WALLACE
```

Make This Happen!

```
l blurb
 The Namesake was released in 2003
| Norse Mythology was released in 2016
| American Gods was released in 2001
Interpreter of Maladies was released in 1996
| A Hologram for the King: A Novel was released in 2012
 The Circle was released in 2013
| The Amazing Adventures of Kavalier & Clay was released in 2000
| Just Kids was released in 2010
| A Heartbreaking Work of Staggering Genius: was released in 2001
| Coraline was released in 2003
What We Talk About When We Talk About Love: Stories was released in 1981
| Where I'm Calling From: Selected Stories was released in 1989
 White Noise was released in 1985
| Cannery Row was released in 1945
| Oblivion: Stories was released in 2004
 Consider the Lobster was released in 2005
```

Print book titles and the length of each title

+	++	
title	character count	
The Namesake	12	
Norse Mythology	15	
American Gods	13	
Interpreter of Maladies	23	
A Hologram for the King: A Novel	32	
The Circle	10	
The Amazing Adventures of Kavalier & Clay	41	
Just Kids	9	
A Heartbreaking Work of Staggering Genius:	42	
Coraline	8	
What We Talk About When We Talk About Love: Stories	51	
Where I'm Calling From: Selected Stories	40	
White Noise	11	
Cannery Row	11	
Oblivion: Stories	17	
Consider the Lobster	20	
+	++	

Last One, I Promise!

```
+-----+
| short title | author | quantity |
+-----+
| American G... | Gaiman, Neil | 12 in stock |
| A Heartbre... | Eggers, Dave | 104 in stock |
+-----+
```