

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
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
Adam	Smith

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

```
SELECT
    CONCAT_WS(' - ', title, author_fname, author_lname)
FROM books;
```

SUBSTRING

Work With Parts Of Strings


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

Hello

```
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

That's a Bad Word 🤖



```
SELECT REPLACE('Hello World', 'Hell', '%$#@');
```

%\$#@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');
```

11

UPPER() and LOWER()

Change A String's Case

```
SELECT UPPER('Hello World');
```

HELLO WORLD

```
SELECT LOWER('Hello World');
```

hello world

That was a lot of stuff!

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!

+-----+	
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	