

# CSCI-UA.60-1, Fall 2019

## READINGS: SQLite FUNCTIONS

(Return to the SQLite Readings Page ([dbw\\_readings\\_sqlite\\_fa19.html](http://dbw_readings_sqlite_fa19.html)))

See [http://sqlite.org/lang\\_corefunc.html](http://sqlite.org/lang_corefunc.html) ([http://sqlite.org/lang\\_corefunc.html](http://sqlite.org/lang_corefunc.html)) for a list of SQLite built-in functions.

<i>Text:</i>	
	Concatenation operator:    For example: <pre>SELECT (title    " ("    author    ") - "    year_written) AS book FROM books ORDER BY title;</pre> <b>results in</b> A Room of One's Own (Woolf, Virginia) - 1922 Anna Karenina (Tolstoy, Leo) - 1875 Bleak House (Dickens, Charles) - 1870 .....
<i>LENGTH(field)</i>	returns the length of the string
<i>TRIM(field)</i>	removes both leading and trailing blanks from a string
<i>UPPER(field)</i>	capitalizes a string
<i>LOWER(field)</i>	puts a string into lower-case
<i>SUBSTRING(field,x,y)</i>	returns y characters from the string starting at position x; note that SQLite starts counting at 1 (not zero)

<i>Numeric</i>	
	Note: use + - * / and ( ) for standard arithmetic operations
<i>ROUND(x,y)</i>	rounds x to y decimal places

<i>Functions that group data for aggregate calculations</i>	
<i>MIN(field)</i>	returns the minimum value
<i>MAX(field)</i>	returns the highest value

<i>SUM(field)</i>	returns the total value
<i>COUNT(field)</i>	returns the number of rows; <i>COUNT(DISTINCT field)</i> returns the number of unique rows
<i>AVG(field)</i>	returns the average (mean)

<i>Operators:</i>	
<i>AND , OR</i>	boolean operators
<i>IN</i>	to select among a limited number of options: e.g. <i>WHERE product_cd IN ('CHK','SAV','CD','MM')</i>
<i>LIKE</i>	to find similar strings e.g. <i>WHERE author LIKE 'W%'</i>