

INTRODUCTION : MY SQL DEMOS WINTER 2019

COUNT	<p>https://www.w3schools.com/sql/sql_count_avg_sum.asp</p>
	<p>Example 1: SELECT COUNT(callNumber) FROM spl_2016.callNumber; Duration 0.03 sec</p> <p>Example 2: SELECT COUNT(*) FROM spl_2016.callNumber; Duration: 0.029 sec</p>
LIMIT	<p>Limits the length of the search by a value (100, 10, 50, etc.) https://www.w3schools.com/sql/sql_top.asp</p>
	<p>Example 1 : SELECT * FROM spl_2016.transactions LIMIT 100;</p> <p>Example 2 : SELECT * FROM spl_2016.title LIMIT 10;</p> <p>Example 3 : SELECT checkOut,checkIn FROM spl_2016.transactions LIMIT 100;</p> <p>Example 4 : SELECT itemNumber,title FROM spl_2016.outraw LIMIT 50;</p> <p>EXAMPLE 3: SELECT id, cout, title, callNumber, itemtype FROM spl_2016.outraw GROUP BY id DESC limit 25 Duration: 0.026 sec</p>
WHERE	<p>Adding a condition to the search https://www.w3schools.com/sql/sql_where.asp</p>
	<p>Example 1 : SELECT itemNumber,bibNumber FROM spl_2016.outraw WHERE itemNumber>100 AND itemNumber<130 LIMIT 100;</p> <p>Example 2 : SELECT * FROM spl_2016.itemToBib WHERE bibNumber>100 AND bibNumber<300 LIMIT 100;</p>
STRING / LIKE	<p>There are many options for searching and comparing strings. See http://dev.mysql.com/doc/refman/5.6/en/string-functions.html</p>

	<p>Example 1: SELECT * FROM spl_2016.title WHERE title = "music" LIMIT 100;</p> <p>Example 2: SELECT * FROM spl_2016.title WHERE title LIKE "%music%" LIMIT 100;</p>
DISTINCT	Retrieve only once even though there may be many instances https://www.w3schools.com/sql/sql_distinct.asp
	<p>Example 1: SELECT DISTINCT bibNumber,subject FROM spl_2016.subject WHERE subject LIKE '%music%' LIMIT 100 ;</p> <p>Example 2 : SELECT DISTINCT id, itemNumber, title FROM spl_2016.outraw WHERE title like '%music' LIMIT 30;</p>
BETWEEN	Alternative to > = and <
	<p>Example 1 : SELECT * FROM spl_2016.subject WHERE bibNumber BETWEEN 20 AND 30 LIMIT 100;</p> <p>Example 2 : SELECT id, cout, title, callNumber, itemtype FROM spl_2016.outraw where cout between '2018-11-02 11:00:00' AND '2018-11-02 11:05:00' GROUP BY id DESC limit 1000 Duration: 0.035 sec</p>
RAND	Generates a random number between (0-1) for every row Used to get N random rows from a table (a statistical sampling)
	<p>Example 1: SELECT * FROM spl_2016.title ORDER BY RAND() LIMIT 100; Duration: 1.709 sec</p> <p>Example 2: (0.00011 is a number giving percentage of total rows required) SELECT * FROM spl_2016.title WHERE RAND(<)<0.00011</p>
DATATYPES	NUMERIC

	<pre>SELECT * FROM spl_2016.subject WHERE bibNumber>100 AND bibNumber<300 LIMIT 100;</pre>
	STRING
	<pre>SELECT * FROM spl_2016.title WHERE title = "music" LIMIT 100;</pre>
TIME	<p>To extract a particular value of the Timestamp https://dev.mysql.com/doc/refman/8.0/en/date-and-time-functions.html</p>
	<pre>Example 1: SELECT * FROM spl_2016.transactions WHERE month(checkIn)="10" LIMIT 100;</pre> <p>Example 2: <pre>SELECT * FROM spl_2016.outraw WHERE date(cout) = '2018-08-08' AND hour(cout) <'11' LIMIT 100; Duration: 24.033 sec</pre></p> <p>Example 3: <pre>SELECT * FROM spl_2016.transactions WHERE year(checkIn) = '2015' AND hour(checkIn)="10" LIMIT 100; Duration: 48.527 sec</pre></p> <p>Example 4: (how many days an item been checked-out, minimum 30 days) <pre>SELECT title, itemtype, TIMESTAMPDIFF(DAY, cout, cin) FROM spl_2016.inraw WHERE DATE(cout) = '2008-02-20' AND TIMESTAMPDIFF(DAY, cout, cin) > 30 ORDER BY TIMESTAMPDIFF(DAY, cout, cin) ASC;</pre></p> <p>Example 5: <pre>SELECT distinct itemtype FROM spl_2016.outraw Where date(cout) = '2018-12-27'</pre></p> <p>Example 6: <pre>SELECT * FROM spl_2016.outraw WHERE YEAR(cout) = 2010 AND title = 'Blade Runner';</pre></p>

JOIN	INNER JOIN Returns a record if present in both joined tables https://www.w3schools.com/sql/sql_join_inner.asp
	<pre>EXAMPLE 1: SELECT checkIn, checkOut, spl_2016.title.bibNumber, spl_2016.title.title FROM spl_2016.title, spl_2016.transactions WHERE spl_2016.transactions.bibNumber = spl_2016.title.bibNumber AND (spl_2016.title.title LIKE '%global%') LIMIT 100; EXAMPLE 2: SELECT spl_2016.outraw.callNumber, spl_2016.outraw.barcode, spl_2016.outraw.title, spl_2016.subject.subject FROM spl_2016.subject, spl_2016.outraw WHERE spl_2016.outraw.bibNumber = spl_2016.subject.bibNumber AND (spl_2016.outraw.title LIKE '%global%') LIMIT 10000;</pre>