

## **Assignment 1: SQL Query**

Project: Create a MySQL query that asks an interesting question about a database

### **1.Approach**

In this assignment, I tried to verify how much the local cultural event in Seattle effects the book checkout in the Seattle public library. For this study, I choose one of the biggest cosplay events in the Northwest “Sakura-Con”, which is held in downtown Seattle every spring. A lot of players dress up as same characters in a cartoon. Especially, Japanese mangas are the most welcomed topic in this event. Famous cartoons artists, novel writers, and singers are invited for this event. This event gathers a lot of people who communicates their interests through a website into a physical place.

### **2.Hypothesis**

The event has 15 years of history. The organization invited 22,000 people in the last year, and the numbers has increased since the first event, in 1998 there were 313 people.<sup>1</sup> The main event is held in Washington State Convention & Trade Center Seattle, however, all kinds of characters parade in downtown Seattle for three days. I assume whether the people like the Japanese cartoon or not, once they meet all the characters, these encounters would invoke interest in the cartoon culture. I expect this leads to an increase in the request of Japanese mangas in - public library.

### **3. Assumption**

Before I run the MySQL program, I expect the consequence to be that there would be a lot of increase both weeks before and after the event. Flrst, I started to run the program based on the Dewey Decimal Classification(DDC) with three categories “Entire comic book”, “Japanese mangas”, and “American comic book”. Then I performed the checkout time at two weeks interval per month to compare the checkout traffic. I guess that there should be different

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<sup>1</sup> <http://www.sakuracon.org/aboutus/history.php>

volume would be checked out during each weekdays I set the interval as a week before the last Friday of each month to a week after the last Sunday.

#### 4. Research

For the exact search, I studied more about DDC. The chart below is the classification for the cartoon part.<sup>2</sup>

741.5 Comic books, graphic novels, fotonovelas, cartoons, caricatures, comicstrips

741.5028 Auxiliary techniques and procedures

741.5074 Museum and exhibits

741.51 Techniques, procedures, apparatus, equipments, materials

741.53 Special aspects of comic books, graphic novels, fotonovelas, cartoons, caricatures, comic strips

741.531 Comic books, graphic novels, fotonovelas, cartoons, caricatures, comic strips displaying specific qualities

741.5315 Science fiction comic strips - history, criticism, techniques

741.53164 Horror comic strips - history, criticism, techniques

741.5352 Superhero comic strips - history, criticism, techniques

741.53543 Romance comic strips - history, criticism, techniques

741.53556 Detective comic strips - history, criticism, techniques

741.5356 Robots - drawing - comic strips

741.5362 Animals - drawing - comic strips

741.537 Monsters - drawing - comic strips

741.56 Cartoons, caricatures, comic strips

741.56028 Auxiliary techniques and procedures

741.56074 Museums and exhibits

741.5607943 Caricatures - awards - Germany

741.569 History, geographic treatment, biography of cartoons, caricatures, comic strips

741.5691 Treatment by areas, regions, places in general

741.569411 Caricatures - Scotland

741.56942 Caricatures - England

741.56971 Caricatures - Canada

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<sup>2</sup> <http://dewey.info/class/741.5/e23/about>

[http://www.oclc.org/content/dam/oclc/dewey/discussion/papers/draft\\_741\\_5.pdf](http://www.oclc.org/content/dam/oclc/dewey/discussion/papers/draft_741_5.pdf)

741.56973 Caricatures - United States

741.56982 Caricatures - Argentina

741.58 Cartoon animation

741.59 History, geographic treatment, biography

741.591 Treatment by areas, regions, places in general

741.59411 Comic books - Scotland

741.5942 Comic books - England

741.5944 Comic books - France

741.5945 Comic books - Italy

741.5947 Comic books - Eastern Europe

741.59493 Comic books - Belgium

741.59519 Comic books - Korea

741.5952 Comic books - Japan

741.5971 Comic books - Canada

741.5973 Comic books - United States

741.5982 Comic books - Argentina

## 5. Process

- Request monthly numbers of checkout books in DDC 741.5 in 2012 and 2013.
- Request monthly numbers of checkout books in DDC 741.5952(Comic books - Japan) in 2012 and 2013.
- Request monthly numbers of checkout books in DDC 741.5973(Comic books - United State) in 2012 and 2013.
- Compare the changes of DDC 741.5952 and DDC 741.5973 within DDC 741.5.

## 6. The Query

Request entire comic book, Japanese, and American comic book checkout information in a certain period.

SELECT

SUM(case

When deweyClass > '741.49' and deweyClass < '741.6' then 1 else 0 end) as Comic,

SUM(case

When deweyClass = '741.5952' then 1 else 0 end) as Japan,

SUM(case

When deweyClass = '741.5973' then 1 else 0 end) as US

FROM

spl2.inraw

WHERE

DATE(cout) > '2012-11-22'

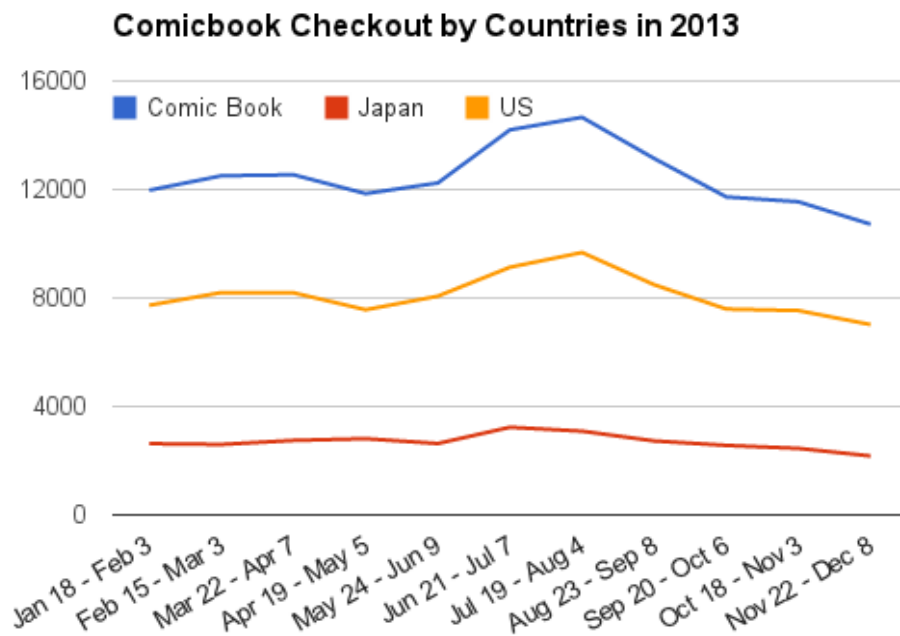
AND DATE(cout) < '2012-12-10'

LIMIT 100000

## 7. Analysis

Unlike like the data I imagine at first, the number of checkout in the Japanese section did not show a dramatic change, there was a 9% increase compare to the last month. However, in the American cartoon section, there was a 15% increase. Since there are more American cartoon in the entire cartoon section, fluctuation in the American section influenced the entire checkout. To make sure of this result, I tried to request numbers for 2012.

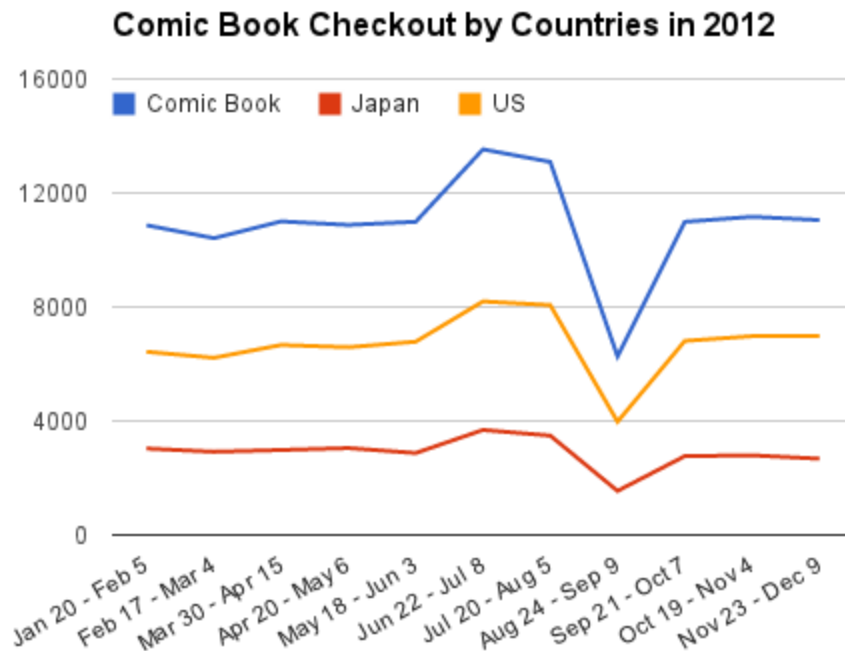
### Comic book checkout by DDC in 2013



Year 2013	Jan 18 Mar 29 - 31	Feb 15 - Mar 3	Mar 22 - Apr 7	Apr 19 - May 5	May 24 - Jun 9	Jun 21 - Jul 7	Jul 19 - Aug 4	Aug 23 - Sep 8	Sep 20 - Oct 6	Oct 18 - Nov 3	Nov 22 - Dec 8
Comic Book	11973	12507	12543	11849	12241	14200	14663	13143	11727	11548	10719
Japan	2628	2599	2747	2811	2633	3233	3088	2728	2564	2453	2174

US	7731	8201	<b>8192</b>	7566	8067	9134	9678	8488	7592	7535	7019
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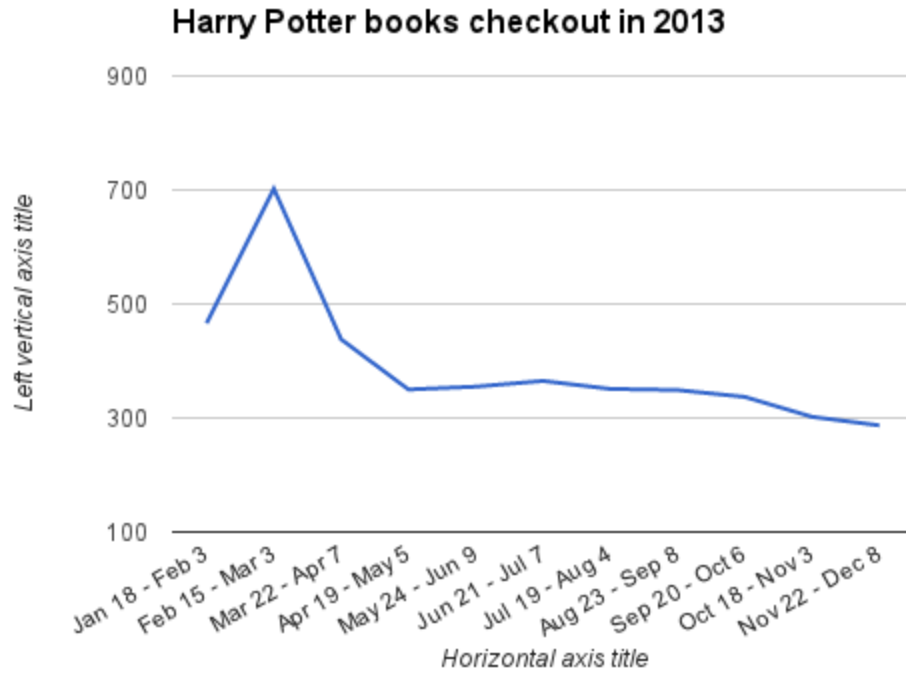
### Comic book checkout by DDC in 2012



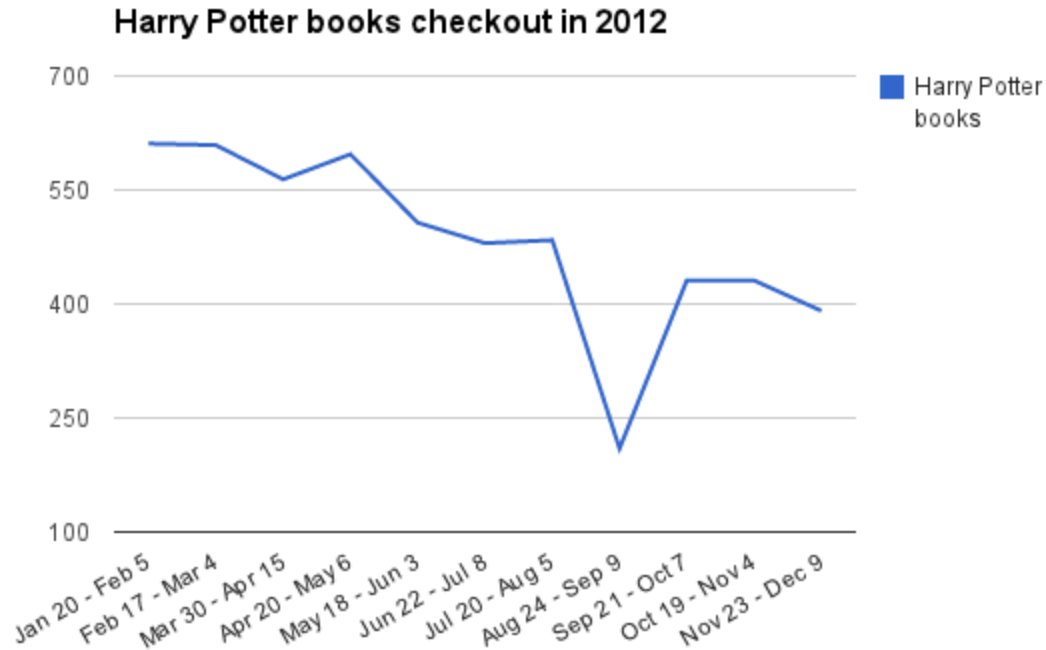
Year 2012 Apr 06 - 08	Jan 20 - Feb 5	Feb 17 - Mar 4	<b>Mar 30 - Apr 15</b>	Apr 20 - May 6	May 18 - Jun 3	Jun 22 - Jul 8	Jul 20 - Aug 5	Aug 24 - Sep 9	Sep 21 - Oct 7	Oct 19 - Nov 4	Nov 23 - Dec 9
Comic Book	10868	10415	<b>11003</b>	10879	10990	13531	13092	6271	10988	11166	11049
Japan	3033	2920	<b>2982</b>	3049	2875	3685	3487	1546	2767	2795	2676
US	6428	6217	<b>6667</b>	6587	6782	8195	8066	3975	6809	6976	6985

## 8. Supplementary survey

To make clear the relationship I suggested, I request another number about the book related "Harry Potter"



Year 2013 Mar 29 - 31	Jan 18 - Feb 3	Feb 15 - Mar 3	<b>Mar 22 - Apr 7</b>	Apr 19 - May 5	May 24 - Jun 9	Jun 21 - Jul 7	Jul 19 - Aug 4	Aug 23 - Sep 8	Sep 20 - Oct 6	Oct 18 - Nov 3	Nov 22 - Dec 8
Harry Potter books	466	702	<b>438</b>	350	355	365	351	349	337	302	287



Year 2012 Apr 06 - 08	Jan 20 - Feb 5	Feb 17 - Mar 4	<b>Mar 30 - Apr 15</b>	Apr 20 - May 6	May 18 - Jun 3	Jun 22 - Jul 8	Jul 20 - Aug 5	Aug 24 - Sep 9	Sep 21 - Oct 7	Oct 19 - Nov 4	Nov 23 - Dec 9
Harry Potter books	611	609	<b>564</b>	597	507	480	484	210	431	431	391

## 9. Conclusion

Compared to the Harry Potter data, comic book checkout shows particular patterns. The number was increased during August, and it went down until the next March. I could not find particular connection between the event and the book checkout, however, it is worth to try to survey from the time the show started (1988).

## Event History<sup>3</sup>

Dates	Location	Attendance
April 24–26, 1998	Double Tree Inn Tukwila, Washington	3133

<sup>3</sup> <http://en.wikipedia.org/wiki/Sakura-Con>  
<http://www.sakuracon.org/aboutus/history.php>

April 23–25, 1999	Double Tree Inn Tukwila, Washington	553
March 31 – April 2, 2000	Double Tree Inn Tukwila, Washington	866
April 27–29, 2001	Holiday Inn and Convention Center Everett, Washington	1,519
April 26–28, 2002	Seattle Airport Hilton & Conference Center Seattle, Washington	2,328
April 4–6, 2003	Seattle Airport Hilton & Conference Center Seattle, Washington	3,023
April 23–25, 2004	Seattle Airport Hilton & Sea-Tac Marriott Hotel Seattle, Washington	4,775
April 8–10, 2005	Seattle Airport Hilton & Sea-Tac Marriott Hotel Seattle, Washington	4,745
March 24–26, 2006	Washington State Convention & Trade Center Seattle, Washington	8,300
April 6–8, 2007	Washington State Convention & Trade Center Seattle, Washington	10,500
March 28–30, 2008	Washington State Convention & Trade Center Seattle, Washington	13,600
April 10–12, 2009	Washington State Convention & Trade Center Seattle, Washington	16,500
April 2–4, 2010	Washington State Convention & Trade Center Seattle, Washington	18,002
April 22–24, 2011	Washington State Convention & Trade Center Seattle, Washington	19,040
April 6–8, 2012	Washington State Convention & Trade Center Seattle, Washington	20,214
March 29-31, 2013	Washington State Convention & Trade Center Seattle, Washington	22,419
April 18-20, 2014	Washington State Convention & Trade Center Seattle, Washington	22,000(est)