

# Fifty Shades of Grey - MySQL case study

---

Jiaheng Tang

## Concept

The topic I'm interested in is about a famous novel series "Fifty Shades of Grey", as well as its film adaptation with the same name. From the table below, we can see that the book series is published from 2011 to 2012, while the movies are released from 2015 to 2018, around Valentine's day.

Book Title	Year Published
Fifty Shades of Grey	2011/6/20
Fifty Shades Darker	2012/4/17
Fifty Shades Freed	2012/4/17

Movie Title	Year Released
Fifty Shades of Grey	2015/2/13
Fifty Shades Darker	2017/2/10
Fifty Shades Freed	2018/2/9

I want to investigate and hopefully find a trend of the number of checkouts of the book or dvd of Fifty Shades Series and see if it's related to the release date of the movie. I think usually when a movie based on a book came out, it will also promote people to read about the original book.

## Data Retrieval

I first ran a query to get all the items that contains the word "fifty shades" in their title to get a general picture. Below is the query I ran.

```
SELECT
    YEAR(cout) AS years,
    bibNumber, itemType, title, COUNT(bibNumber) AS Counts
FROM
    spl_2016.inraw
WHERE
    title LIKE '%fifty shades%'
GROUP BY bibNumber , itemType , title, YEAR(cout)
ORDER BY YEAR(cout);
```

years	bibNumber	itemType	title	Counts
2012	2794842	acbk	Fifty shades of Grey	916
2012	2838693	accd	Fifty shades of grey the classical album	14
2012	2794840	acbk	Fifty shades darker	346
2012	2845637	acbk	Fifty shades of pleasure a bedside companion sex secrets that hurt so good	16
2012	2794841	acbk	Fifty shades freed	276
2012	2858710	acbk	Fifty shades of chicken a parody in a cookbook	4
2012	2800725	accd	Fifty shades of Grey	122
2012	2800724	accd	Fifty shades freed	50
2012	2851345	acbk	Fifty writers on Fifty shades of grey	2
2012	2800723	accd	Fifty shades darker	45
2013	2800723	accd	Fifty shades darker	94
2013	2794841	acbk	Fifty shades freed	352
2013	2845637	acbk	Fifty shades of pleasure a bedside companion sex secrets that hurt so good	28
2013	2858710	acbk	Fifty shades of chicken a parody in a cookbook	56
2013	2800724	accd	Fifty shades freed	73
2013	2872772	acbk	Fifty shades of Louisa May a memoir of transcendent sex	10
2013	2862543	acbk	Fifty shades freed	57
2013	2838693	accd	Fifty shades of grey the classical album	57
2013	2906530	acbk	Fifty shades of kale 50 fresh and satisfying recipes that are bound to please	42
2013	2851345	acbk	Fifty writers on Fifty shades of grey	16
2013	2800725	accd	Fifty shades of Grey	227
2013	2794842	acbk	Fifty shades of Grey	729
2013	2862544	acbk	Fifty shades of Grey	113
2013	2794840	acbk	Fifty shades darker	396
2013	2862542	acbk	Fifty shades darker	65
2014	2862543	acbk	Fifty shades freed	19
2014	2800725	accd	Fifty shades of Grey	133
2014	2872772	acbk	Fifty shades of Louisa May a memoir of transcendent sex	5
2014	2906530	acbk	Fifty shades of kale 50 fresh and satisfying recipes that are bound to please	60
2014	2800723	accd	Fifty shades darker	36
2014	2851345	acbk	Fifty writers on Fifty shades of grey	3
2014	2794840	acbk	Fifty shades darker	82
2014	2794842	acbk	Fifty shades of Grey	206
2014	2858710	acbk	Fifty shades of chicken a parody in a cookbook	20
2014	2838693	accd	Fifty shades of grey the classical album	37
2014	2794841	acbk	Fifty shades freed	83
2014	2845637	acbk	Fifty shades of pleasure a bedside companion sex secrets that hurt so good	12

But there are a lot of non-related items, so I chose to exclude some words in the title like 'chicken' and 'kale'. Here is the second query I ran.

```
SELECT
    YEAR(cout) AS years,
    bibNumber, itemType, title, COUNT(bibNumber) AS Counts
FROM
    spl_2016.inraw
WHERE
    title LIKE '%fifty shades%' AND title NOT LIKE '%chicken%' AND title
    NOT LIKE '%kale%'
GROUP BY bibNumber , itemType , title, YEAR(cout)
ORDER BY YEAR(cout);
```

years	bibNumber	itemType	title	Counts
2012	2794842	acbk	Fifty shades of Grey	916
2012	2838693	accd	Fifty shades of grey the classical album	14
2012	2794840	acbk	Fifty shades darker	346
2012	2845637	acbk	Fifty shades of pleasure a bedside companion sex secrets that hurt so good	16
2012	2794841	acbk	Fifty shades freed	276
2012	2800725	accd	Fifty shades of Grey	122
2012	2851345	acbk	Fifty writers on Fifty shades of grey	2
2012	2800724	accd	Fifty shades freed	50
2012	2800723	accd	Fifty shades darker	45
2013	2862543	acbk	Fifty shades freed	57
2013	2800724	accd	Fifty shades freed	73
2013	2851345	acbk	Fifty writers on Fifty shades of grey	16
2013	2838693	accd	Fifty shades of grey the classical album	57
2013	2862544	acbk	Fifty shades of Grey	113
2013	2800725	accd	Fifty shades of Grey	227
2013	2794842	acbk	Fifty shades of Grey	729
2013	2862542	acbk	Fifty shades darker	65
2013	2794840	acbk	Fifty shades darker	396
2013	2845637	acbk	Fifty shades of pleasure a bedside companion sex secrets that hurt so good	28
2013	2800723	accd	Fifty shades darker	94
2013	2794841	acbk	Fifty shades freed	352
2013	2872772	acbk	Fifty shades of Louisa May a memoir of transcendental sex	10
2014	2862544	acbk	Fifty shades of Grey	29
2014	2838693	accd	Fifty shades of grey the classical album	37
2014	2794841	acbk	Fifty shades freed	83
2014	2872772	acbk	Fifty shades of Louisa May a memoir of transcendental sex	5
2014	2862542	acbk	Fifty shades darker	26
2014	2800724	accd	Fifty shades freed	28
2014	2851345	acbk	Fifty writers on Fifty shades of grey	3
2014	2862543	acbk	Fifty shades freed	19
2014	2800725	accd	Fifty shades of Grey	133
2014	2794840	acbk	Fifty shades darker	82
2014	2800723	accd	Fifty shades darker	36
2014	2845637	acbk	Fifty shades of pleasure a bedside companion sex secrets that hurt so good	12
2014	2794842	acbk	Fifty shades of Grey	206
2015	2845637	acbk	Fifty shades of pleasure a bedside companion sex secrets that hurt so good	9
2015	2862542	acbk	Fifty shades darker	26

I did a third query to find the top 20 checkouts of all time related to 'Fifty Shades of Grey'.

```

SELECT
    YEAR(cout) AS years,
    bibNumber, itemType, title, COUNT(bibNumber) AS Counts
FROM
    spl_2016.inraw
WHERE
    title LIKE '%fifty shades%' AND title NOT LIKE '%chicken%' AND title
    NOT LIKE '%kale%'
GROUP BY bibNumber , itemType , title, YEAR(cout)
ORDER BY Counts DESC
LIMIT 20;

```

years	bibNumber	itemType	title	Counts
2015	3091641	acdvd	Fifty shades of Grey	1239
2016	3091641	acdvd	Fifty shades of Grey	1181
2012	2794842	acbk	Fifty shades of Grey	916
2017	3266132	acdvd	Fifty shades darker	748
2013	2794842	acbk	Fifty shades of Grey	729
2018	3363133	acdvd	Fifty shades freed	572
2013	2794840	acbk	Fifty shades darker	396
2017	3091641	acdvd	Fifty shades of Grey	383
2016	3183279	acdvd	Fifty shades of black	370
2013	2794841	acbk	Fifty shades freed	352
2012	2794840	acbk	Fifty shades darker	346
2018	3266132	acdvd	Fifty shades darker	337
2015	3080559	accd	Fifty shades of grey original motion picture soundtrack	296
2012	2794841	acbk	Fifty shades freed	276
2017	3183279	acdvd	Fifty shades of black	230
2013	2800725	accd	Fifty shades of Grey	227
2014	2794842	acbk	Fifty shades of Grey	206
2015	2794842	acbk	Fifty shades of Grey	164
2014	2800725	accd	Fifty shades of Grey	133
2012	2800725	accd	Fifty shades of Grey	122

I found that the three main item types are book, dvd and cd. So I'm interested in how the amount of checkouts for each of the item type changes over time, and if it's related to the release of the films. I constructed a query to get the amount of checkouts by book ordered by year and month.

```

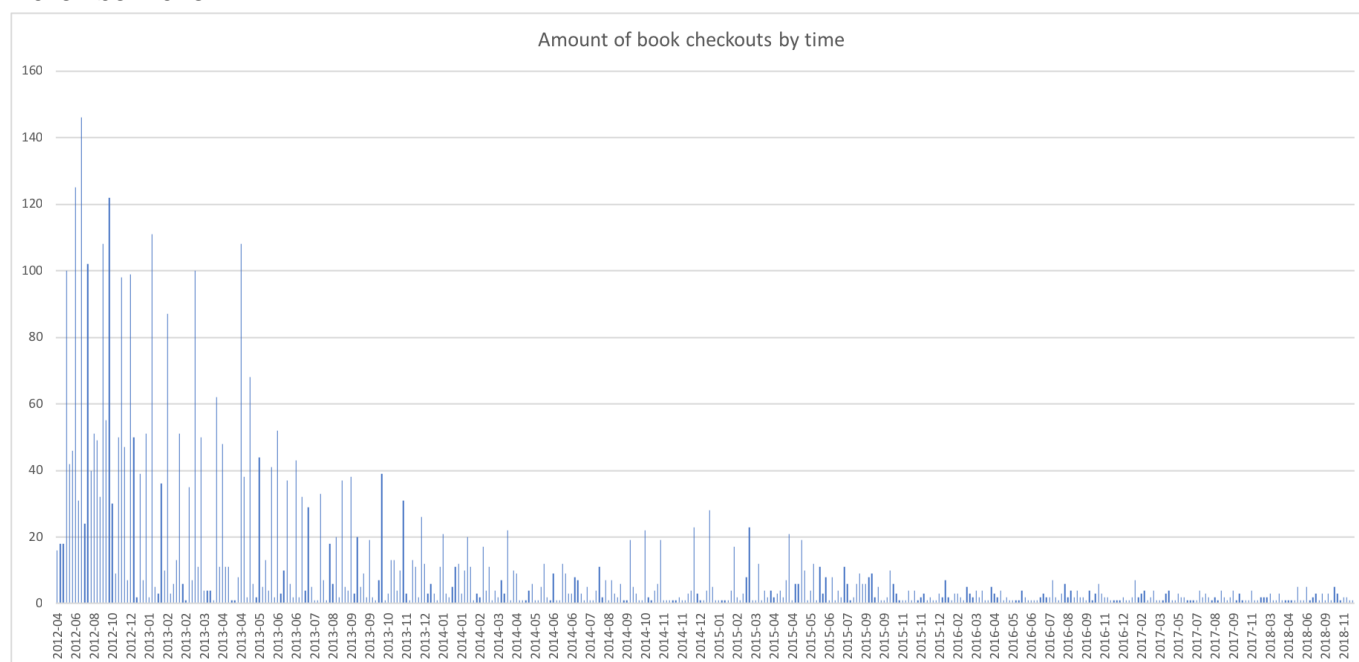
SELECT
    DATE_FORMAT(cout, '%Y-%m') AS years,
    bibNumber, itemType, title, COUNT(bibNumber) AS Counts
FROM
    spl_2016.inraw
WHERE
    title LIKE '%fifty shades%' AND title NOT LIKE '%chicken%' AND title
    NOT LIKE '%kale%' AND itemType = 'acbk'
GROUP BY bibNumber , itemType , title, DATE_FORMAT(cout, '%Y-%m')
ORDER BY DATE_FORMAT(cout, '%Y-%m')

```

I also ran the query for CD and DVD.

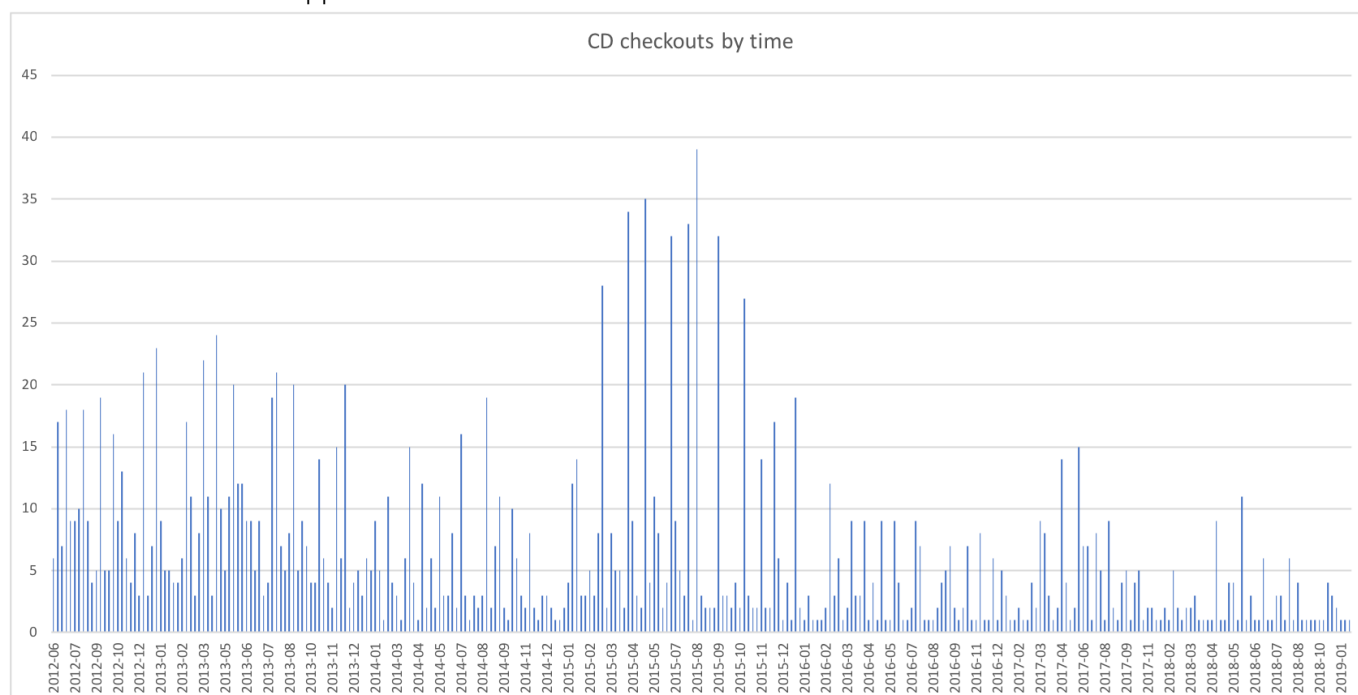
years	bibNumber	itemType	title	Counts
2012-04	2794842	acbk	Fifty shades of Grey	16
2012-05	2794840	acbk	Fifty shades darker	18
2012-05	2794841	acbk	Fifty shades freed	18
2012-05	2794842	acbk	Fifty shades of Grey	100
2012-06	2794840	acbk	Fifty shades darker	42
2012-06	2794841	acbk	Fifty shades freed	46
2012-06	2794842	acbk	Fifty shades of Grey	125
2012-07	2794840	acbk	Fifty shades darker	31
2012-07	2794842	acbk	Fifty shades of Grey	146
2012-07	2794841	acbk	Fifty shades freed	24
2012-08	2794842	acbk	Fifty shades of Grey	102
2012-08	2794841	acbk	Fifty shades freed	40
2012-08	2794840	acbk	Fifty shades darker	51
2012-09	2794840	acbk	Fifty shades darker	49
2012-09	2794841	acbk	Fifty shades freed	32
2012-09	2794842	acbk	Fifty shades of Grey	108
2012-10	2794840	acbk	Fifty shades darker	55
2012-10	2794842	acbk	Fifty shades of Grey	122
2012-10	2794841	acbk	Fifty shades freed	30
2012-11	2845637	acbk	Fifty shades of pleasure a bedside companion sex secrets that hurt so good	9
2012-11	2794840	acbk	Fifty shades darker	50
2012-11	2794842	acbk	Fifty shades of Grey	98
2012-11	2794841	acbk	Fifty shades freed	47
2012-12	2845637	acbk	Fifty shades of pleasure a bedside companion sex secrets that hurt so good	7
2012-12	2794842	acbk	Fifty shades of Grey	99
2012-12	2794840	acbk	Fifty shades darker	50
2012-12	2851345	acbk	Fifty writers on Fifty shades of grey	2
2012-12	2794841	acbk	Fifty shades freed	39
2013-01	2862542	acbk	Fifty shades darker	7
2013-01	2794840	acbk	Fifty shades darker	51

Below are the summary charts of the amount of book, CD and DVD checkouts by month from April 2012 to November 2018.

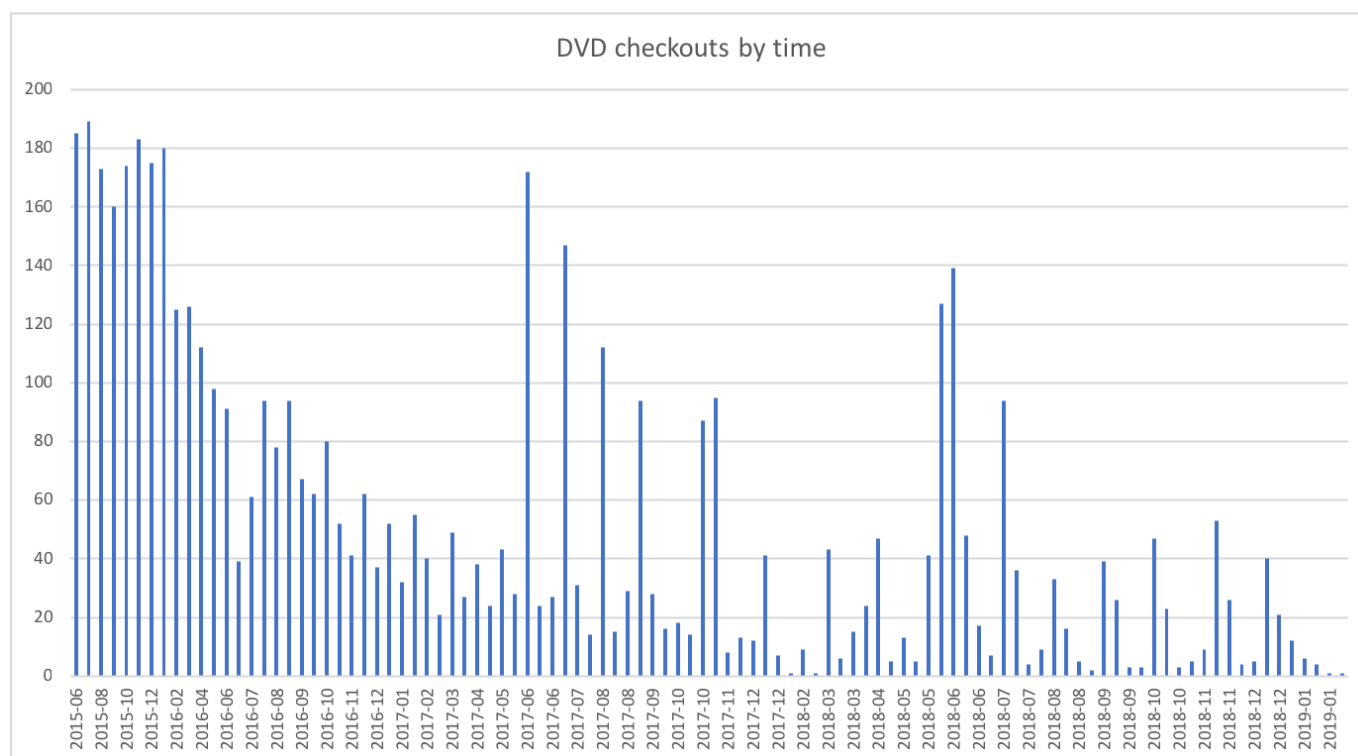


We can clearly see that the peak happened around June 2012. Recall that the last two books of the trilogy was published on April 2012. The amount of checkouts then slowly dropped. There's a smaller peak from Sept 2014 to Apr 2015, and the first film was released on Feb 2015, so maybe there's a correlation here, but I will need to

find more evidence to support it.



For cd, from 2012 to 2014, it maintained a constant high, and then it peaked on 2015. The peak started from Feb 2015, which is when the first film is released. I'm not sure if the itemType **accd** means just CDs or also audio books. There's also two smaller highs on Mar 2017-Aug 2017 and Apr 2018-May 2018, which are all close to the release dates of the last two films.



For DVD, since it's released after the film, the date is from Jun 2015 to Jan 2019. We can see a trend of higher amount of checkouts 4 month after the movies are released. So the three movies are all released around February, and the DVDs peaks at June of 2015, 2017 and 2018. After some research online, I found that this matches the released date of the DVDs.

Fifty Shades of Grey / Initial DVD release

May 8, 2015

USA



People also search for

Fifty Shades Darker / Initial DVD release

May 9



Fifty Shades Freed / Initial DVD release

May 8, 2018

