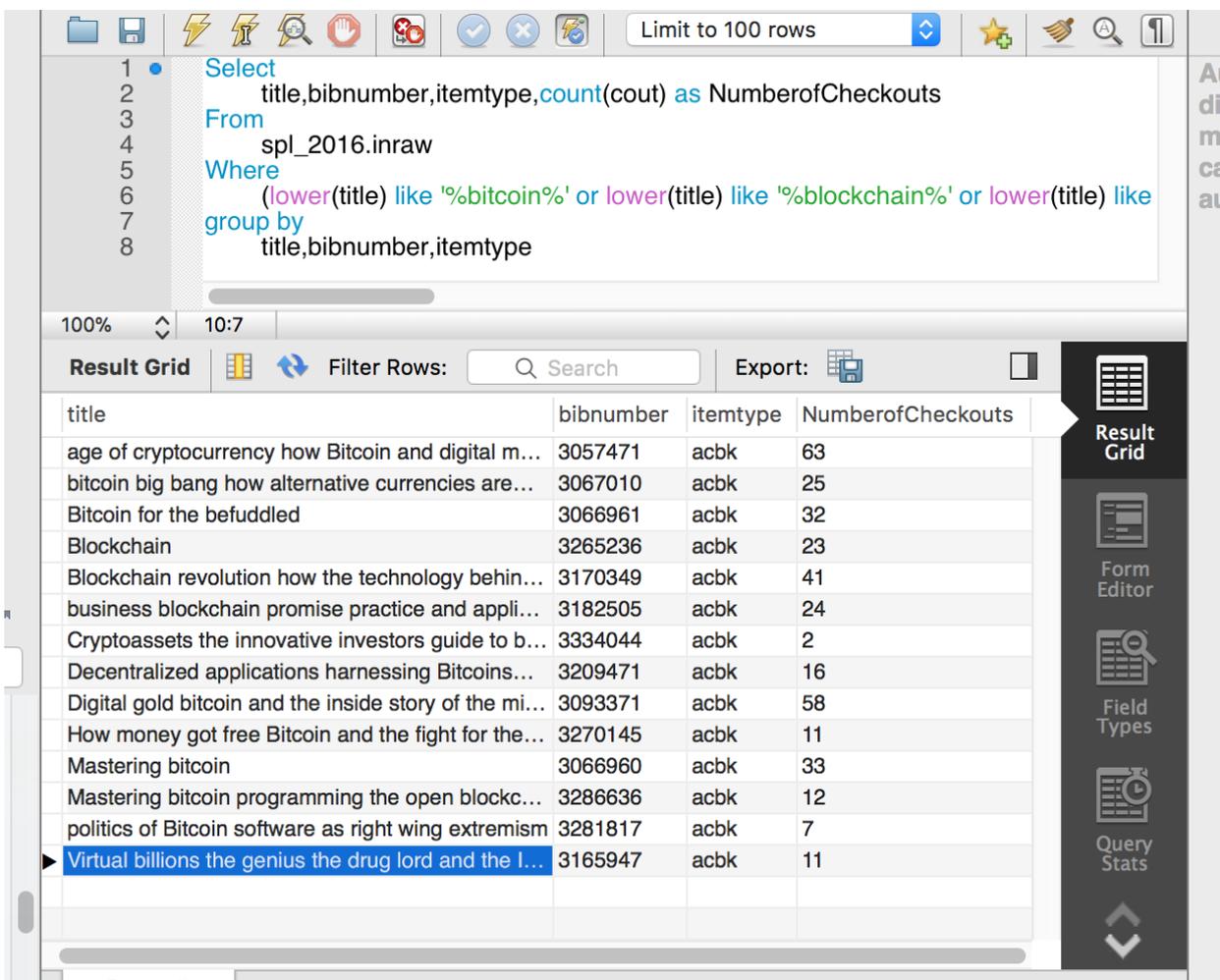


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## Bitcoin Gold Rush

**Concept:** Personally, I'm very interested in Bitcoin and cryptocurrency in general. There have been quite a few bitcoin milestones such as the first time it hit \$1000 to the first time it \$19,000 this past year. I decided to search through the SPL database for any media related to Bitcoin. My idea is to see if there exists any correlation between the rise of bitcoin and the number of checkouts over the years.

- 1) Find how much bitcoin related media there is.
  - a. Query:



The screenshot shows a database query interface. The query is as follows:

```
1 Select
2 title,bibnumber,itemtype,count(cout) as NumberofCheckouts
3 From
4 spl_2016.inraw
5 Where
6 (lower(title) like '%bitcoin%' or lower(title) like '%blockchain%' or lower(title) like
7 group by
8 title,bibnumber,itemtype
```

The results are displayed in a table with the following columns: title, bibnumber, itemtype, and NumberofCheckouts. The table contains 14 rows of data, with the first row highlighted in blue.

title	bibnumber	itemtype	NumberofCheckouts
age of cryptocurrency how Bitcoin and digital m...	3057471	acbck	63
bitcoin big bang how alternative currencies are...	3067010	acbck	25
Bitcoin for the befuddled	3066961	acbck	32
Blockchain	3265236	acbck	23
Blockchain revolution how the technology behin...	3170349	acbck	41
business blockchain promise practice and appli...	3182505	acbck	24
Cryptoassets the innovative investors guide to b...	3334044	acbck	2
Decentralized applications harnessing Bitcoins...	3209471	acbck	16
Digital gold bitcoin and the inside story of the mi...	3093371	acbck	58
How money got free Bitcoin and the fight for the...	3270145	acbck	11
Mastering bitcoin	3066960	acbck	33
Mastering bitcoin programming the open blockc...	3286636	acbck	12
politics of Bitcoin software as right wing extremism	3281817	acbck	7
Virtual billions the genius the drug lord and the l...	3165947	acbck	11

Results were a bit disappointing because there are only 14 bitcoin related media and it only had 63 checkouts.

2) See how the checkout times vary by month every year.

```
1 • SELECT
2 YEAR(cout) AS CheckoutYear,
3 MONTH(cout) AS CheckoutMonth,
4 COUNT(cout) AS CheckoutCount
5 FROM
6 spl_2016.outraw
7 WHERE
8 (lower(title) like '%bitcoin%' or lower(title) like '%blockchain%' or lower(title) like '%cryptocurrency%')
9 AND SUBSTRING(itemType, 3, 4) = 'bk'
10 GROUP BY CheckoutYear , CheckoutMonth
```

CheckoutYear	CheckoutMonth	CheckoutCount
2015	2	16
2015	3	10
2015	4	7
2015	5	21
2015	6	15
2015	7	14
2015	8	13
2015	9	12
2015	10	5
2015	11	8
2015	12	9
2016	1	8
2016	2	5
2016	3	7
2016	4	8
2016	5	13
2016	6	12
2016	7	12
2016	8	12
2016	9	14
2016	10	8
2016	11	4
2016	12	12
2017	1	16
2017	2	7
2017	3	11
2017	4	12
2017	5	16
2017	6	19
2017	7	28
2017	8	31
2017	9	29
2017	10	26
2017	11	26
2017	12	35

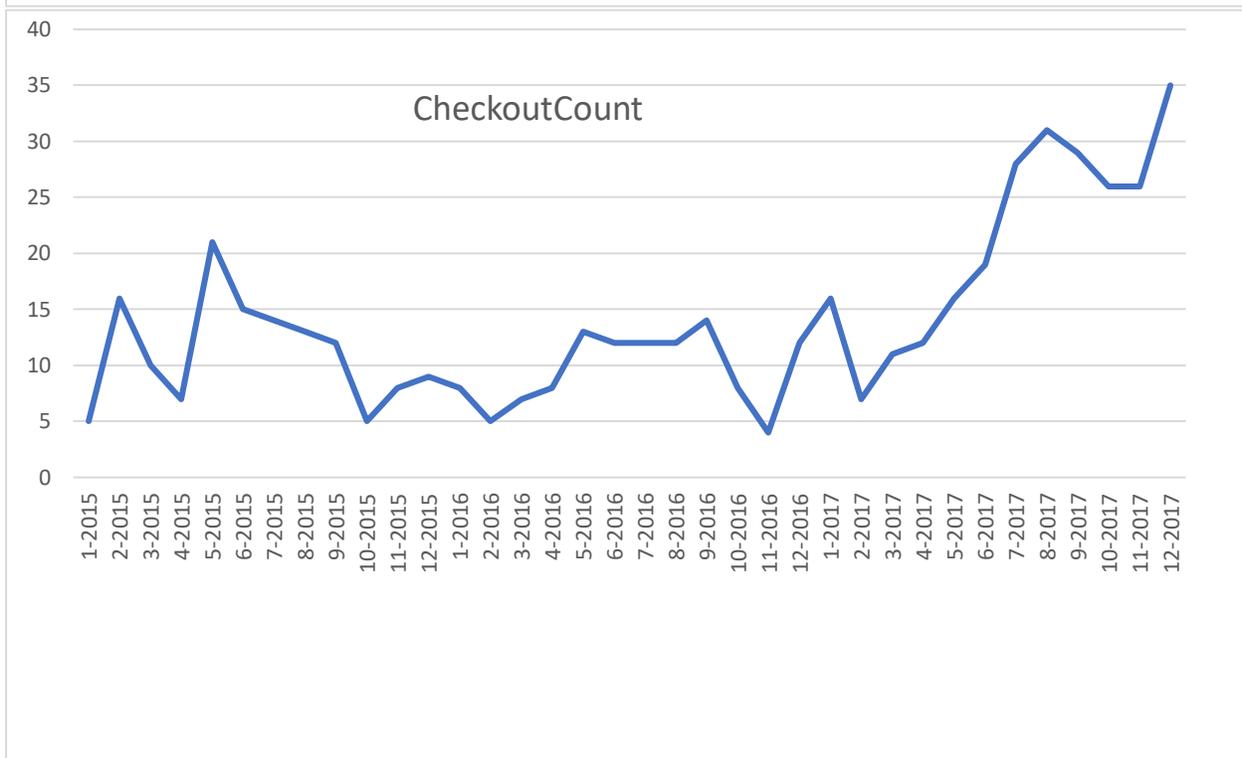
### 3) Compare the price of bitcoin with the number of checkouts

Query:

```

1 SELECT
2 YEAR(cout) AS CheckoutYear,
3 MONTH(cout) AS CheckoutMonth,
4 COUNT(cout) AS CheckoutCount
5 FROM
6 spl_2016.outraw
7 WHERE
8 (lower(title) like '%bitcoin%' or lower(title) like '%blockchain%' or lower(title) like '%cryptocurrency%')
9 AND SUBSTRING(itemType, 3, 4) = 'bk'
10 GROUP BY CheckoutYear , CheckoutMonth

```



These graphs do not fully reflect the effect bitcoin caused due to the dramatic increase that occurred last year, but we do see an increasing trend for 2017. This makes sense since the price of bitcoin skyrocketed last year.