NEW YORK TIMES ARTICLES AND SHARE PRICE RETURN / VOLATILITY

STAT 418 Final Project
Ah Sung Yang
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DATA SOURCE

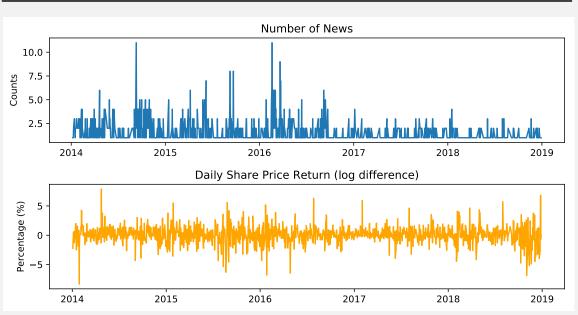
- Obtained articles from <u>New York Times Article</u>
 <u>Search API</u>
- Searched all the articles on Apple Inc. published from Jan. 1, 2014 to Dec. 31, 2018 (5 years)
 - Besides the query, also used the filter query field to ensure articles have Apple Inc in their organizations field
- Extracted the following information from the JSON file
 - abstract, date, desk, document type, headline, id, locations, organizations, snippet, source, subjects, type of material, url, word count
- For the share price data, used the python package called yahoo_financial to download daily share prices from Yahoo Finance API

abstract	date	desk	doctype	headline	id	locations	organization	snippet	source	subjects	tyj
b'Apple\xe2\x80\x99s iCloud data service works	2014- 01-07	Business	b'article'	b'Taking Along iCloud Calendars'	5c88530a40d36ff070b32a3a	0	[Apple Inc, iCloud, Samsung Group, Google Inc]	b'Apple\xe2\x80\x99s iCloud data service works	The New York Times	[Android (Operating System), Smartphones]	Questi
b'In March, Apple and Samsung Electronics are	2014- 01-09		b'article'	b'Apple and Samsung Chiefs to Meet a Mediator	5c883a5240d36ff070ad279b	0	[Apple Inc, Samsung Electronics Co]	b'In March, Apple and Samsung Electronics are	The New York Times	[Inventions and Patents, Smartphones, Suits an	Nev
b'Last year was the first in which personal co	2014- 01-10		b'article'	b'For PC Makers, the Good News on 2013 Is That	5c883a5240d36ff070ad27d7	0	[Apple Inc, Dell Inc, Gartner Inc, Hewlett- Pac	b'Last year was the first in which personal co	The New York Times	[Computers and the Internet, Desktop Computers]	Nev
b'A summary of differences in the latest Windo	2014- 01-10	Business	b'article'	b'Changes in Windows 8.1, With Skype Replacing	5c88530a40d36ff070b32a3c	0	[Apple Inc, Microsoft Corporation, Skype Techn	b'A summary of differences in the latest Windo	The New York Times	[Windows (Operating System), Mobile Applicatio	Questi
b'To draw young buyers and increase its market	2014- 01-13	Business	b'article'	b'Cost of Cool in India? An iPhone'	5c8873ec40d36ff070b92dac	[India]	[Apple Inc]	b'To draw young buyers and increase its market	The New York Times	[iPhone, Prices (Fares, Fees and Rates), Smart	Nev

	doctype	id		source	id		type	id
0	b'article'	1502	4	The New York Times	1538	5	News	1212
1	b'multimedia'	53	2	International New York Times	8	9	Question	206
2	b'paidpost'	1	3	Reuters	6	8	Op-Ed	47
			1	CNBC	3	14	Video	24
			0		1	2	Interactive Feature	23

FINAL PROJECT

NUMBER OF ARTICLES: 1,556 (JAN. 1, 2014 – DEC. 31, 2018)



- Find the relationship between the daily number of articles and the share price returns or stock volatility
- Further create a Shiny app or other interactive tool that illustrates both data at once
- Areas to explore:
 - Try the same analysis on a different company/stock or on a stock market index
 - Try it on a weekly or monthly basis
 - Try it with stock volatility
 - Perform text analysis on the headline or snippet