Topic: Valuation stock price by scrapping from website

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Description:
The main idea of our project is scrapping data from yahoo finance website such as cash flow statement, income statement and balance sheet for our further financial analyze. The data is dynamic therefore we will need to import webdriver from selenium.
Websites(for company APPLE):
Income statemnt - 'https://finance.yahoo.com/quote/AAPL/financials?p=AAPL'
Balance sheet - 'https://finance.yahoo.com/quote/AAPL/balance-sheet?p=AAPL'
Cash flow statment - 'https://finance.yahoo.com/quote/AAPL/cash-flow?p=AAPL'

For example we could estimate stock value by our project which bases on the discount of cash flow method (DCF). In this case, data from cash flow statement will be useful for our analyze.
  Present value = Future value / interest rate

After we import webdrive, we will need to use ChromeDriverManager to help us read the website. Besides, data

frame could also help us to make the table much clear. The result after scraping will look like following:

	Breakdown	ttm	9/29/2020	9/29/2019	9/29/2018	9/29/2017
0	Operating Cash Flow	88921000	80674000	69391000	77434000	63598000
1	Investing Cash Flow	795000	4289000	45896000	16066000	46446000
2	Financing Cash Flow	93662000	86820000	90976000	87876000	17347000
3	End Cash Position	37719000	39789000	50224000	25913000	20289000
4	Income Tax Paid Supplemental Data	6895000	9501000	15263000	10417000	11591000
5	Interest Paid Supplemental Data	2850000	3002000	3423000	3022000	2092000
6	Capital Expenditure	8702000	7309000	10495000	13313000	12795000
7	Issuance of Capital Stock	878000	880000	781000	669000	555000
8	Issuance of Debt	13881000	16091000	6963000	6969000	28662000
9	Repayment of Debt	12629000	12629000	8805000	6500000	3500000
10	Repurchase of Capital Stock	76427000	72358000	66897000	72738000	32900000
11	Free Cash Flow	80219000	73365000	58896000	64121000	50803000

From the table we could have free cash flow from 2017 to 2020 for company APPLE, the increase rate is about 9%. Considering the market long term interest rate is usually deemed by 10 years US government bonds which is around 3%. According to the formula of DCF, we calculated current value of APPLE company is USD 882 billion. The total number of share outstanding of AAPLE is 16.8 billion. Therefore, the stock value which base on our model is equal to 882/16.8 = 52.5.