BUZZ CHRONICLES > TRADING PYTHON Saved by @havearun See On Twitter

## Twitter Thread by Indian Quant



y

## Nano Course On Python For Trading

\_\_\_\_\_

Module 2

## In this post, I will attempt to show a simple Python code to download the past 5 years' Nifty50 stocks EOD Data using the NSEpy library in less than 2

Nano Course On Python For Trading

Python makes it very easy to analyze and visualize time series data when you\u2019re a beginner. It's easier when you don't have to install python on your PC (that's why it's a nano course, you'll learn python...

- Indian Quant (@indian\_quant) December 13, 2021

The first few lines are simple to import statements. Pulling public library NSEpy <u>https://t.co/OW1TPC7QXC</u> that we can use to extract historical and real-time data from NSE's website. Then, we import the most popular pandas library.

```
1 from nsepy import get_history
2 from datetime import date, datetime
3 import pandas as pd
4
```

Then I define a function "fetchData" that fetches the data using the built-in get\_history function of the nsepy library. I adjust the original data frame to store open, high, low and close prices. The original data frame sends more columns - Volume, Turnover, %Deliverable, etc.

```
def fetchData(ticker,startDate,endDate):
    # save 0-H-L-C columns
    stock = get_history(symbol=ticker, start=startDate, end=endDate)
    df = pd.DataFrame()
    stock.reset_index(inplace=True)
    df['Date'] = stock['Date']
    df['Open'] = stock['Open']
    df['High'] = stock['Open']
    df['Low'] = stock['Low']
    df['Close'] = stock['Close']
    return df
```

I then go ahead and put all Nifty50 tickers in a Python list named nifty50list. I also set our start-date (2014-01-01), end-date(2022-01-21) in the YYYY-MM-DD format, and the path where I want to save my files on my PC.

```
# LIST OF NIFTY 50 Stocks
nifty50list = ['ADANIPORTS', 'ASIANPAINT', 'AXISBANK', 'BAJAJ-AUTO', 'BAJFINANCE', 'BAJAJFINSV', 'BPCL', 'BHARTIARTL',
'BRITANNIA', 'CIPLA', 'COALINDIA', 'DIVISLAB', 'DRREDDY', 'EICHERMOT', 'GRASIM', 'HCLTECH', 'HDFCBANK', 'HDFCLIFE',
'HEROMOTOCO', 'HINDALCO', 'HINDUNILVR', 'HDFC', 'ICICIBANK', 'ITC', 'IOC', 'INDUSINDBK', 'INFY', 'JSWSTEEL', 'KOTAKBANK',
'LT', 'M&M', 'MARUTI', 'NTPC', 'NESTLEIND', 'ONGC', 'POWERGRID', 'RELIANCE', 'SBILIFE', 'SHREECEM', 'SBIN', 'SUNPHARMA',
'TCS', 'TATACONSUM', 'TATAMOTORS', 'TATASTEEL', 'TECHM', 'TITAN', 'UPL', 'ULTRACEMCO', 'WIPRO']
start_date = date(2014,1,1)
end_date = date(2022,1,21)
#path to save the data
path = "C:\\Users\\pvarshney\\Downloads\\BlackField Research\\Videos\\Nifty 50 Data\\"
```

Finally, I loop through all the Nifty50 tickers calling the fetchData function on each of them and saving them in the path specified above in the CSV format e.g. ADANIPORTS.csv, which came first. This process is repeated for each and every symbol in Nifty50.

```
for ticker in nifty50list:
    #fetch data for this stock
    tickerData = fetchData(ticker,start_date,end_date)
    tickerData.to_csv(path+ ticker+'.csv')
```

The result is 2 minutes to download 50 stocks worth of data! Each ticker's data is saved in a file named Ticker.csv You can visit this colab notebook and try out your hands with the code <a href="https://t.co/HDB94AATFr">https://t.co/HDB94AATFr</a>

Date modified	Туре	Size
22-01-2022 01:23	Microsoft Excel C	87 KB
22-01-2022 01:23	Microsoft Excel C	83 KB
22-01-2022 01:23	Microsoft Excel C	89 KB
22-01-2022 01:23	Microsoft Excel C	89 KB
22-01-2022 01:23	Microsoft Excel C	89 KB
22-01-2022 01:23	Microsoft Excel C	82 KB
22-01-2022 01:23	Microsoft Excel C	82 KB
22-01-2022 01:23	Microsoft Excel C	89 KB
22-01-2022 01:23	Microsoft Excel C	82 KB
22-01-2022 01:23	Microsoft Excel C	82 KB
22-01-2022 01:23	Microsoft Excel C	89 KB
22-01-2022 01:23	Microsoft Excel C	89 KB
22-01-2022 01:23	Microsoft Excel C	95 KB
22-01-2022 01:23	Microsoft Excel C	87 KB
22-01-2022 01:23	Microsoft Excel C	85 KB
22-01-2022 01:24	Microsoft Excel C	89 KB
22-01-2022 01:23	Microsoft Excel C	88 KB
22-01-2022 01:23	Microsoft Excel C	42 KB
22-01-2022 01:23	Microsoft Excel C	89 KB
22-01-2022 01:24	Microsoft Excel C	81 KB
22-01-2022 01:24	Microsoft Excel C	86 KB
22-01-2022 01:24	Microsoft Excel C	83 KB
22-01-2022 01:24	Microsoft Excel C	86 KB
22-01-2022 01:24	Microsoft Excel C	87 KB
22-01-2022 01:24	Microsoft Excel C	81 KB
22-01-2022 01:24	Microsoft Excel C	82 KB
22-01-2022 01:24	Microsoft Excel C	84 KB
22-01-2022 01:24	Microsoft Excel C	87 KB
22-01-2022 01:24	Microsoft Excel C	89 KB
22-01-2022 01:24	Microsoft Excel C	85 KB
22-01-2022 01:24	Microsoft Excel C	89 KB
22-01-2022 01:24	Microsoft Excel C	93 KB
22-01-2022 01:24	Microsoft Excel C	82 KB
22-01-2022 01:24	Microsoft Excel C	81 KB
22-01-2022 01:24	Microsoft Excel C	82 KB
22-01-2022 01:24	Microsoft Excel C	87 KB
22-01-2022 01:24	Microsoft Excel C	44 KB
22-01-2022 01:24	Microsoft Excel C	83 KB
22-01-2022 01:24	Microsoft Excel C	96 KB
	Date modified 22-01-2022 01:23 22-01-2022 01:24 22-01-2022 01:2	Date modified         Type           22-01-2022 01:23         Microsoft Excel C           22-01-2022 01:24         Micros

In Module 3, we will learn to use this data to create and test some trading strategies. Until then, take care and have a great time learning.

Note: NSE website official Terms of Use section 22.f reads as below:

22. Specific Prohibited Uses:

The Site may be used only for lawful purposes by individuals for personal, non-commercial use only. NSE specifically prohibits any other use of the Site.