

Assignment 3

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In [8]: from tiingo import TiingoClient
import pandas as pd
from datetime import date
from dateutil.relativedelta import relativedelta
config = {}

config['session'] = True

config['api_key'] = "110ee73e29ec4269f49eb85cfb4b976ab8e73361"

client = TiingoClient(config)

In [9]: #Testing the process
historical_prices = client.get_ticker_price("GOOGL",
    fmt='csv',
    startDate= date.today() - relativedelta(years=1),
    endDate=date.today(),
    frequency='daily')

In [10]: file_name = "GOOG.csv"
with open(file_name, 'w') as outfile:
    outfile.write(historical_prices)

In [11]: #Function
def download_financial_data(ticker,startDate,endDate):
    fin_data = client.get_ticker_price(ticker,
        fmt='csv',
        startDate = startDate,
        endDate = endDate,
        frequency = 'daily')

    file_name = f"{ticker}.csv"
    with open(file_name,'w') as outfile:
        outfile.write(fin_data)
    print(f'{ticker}.csv created')

In [26]: def financial_data_summary(data):
    return f"Average closing price: {round(data['close'].mean(),2)} \n Max closing price: {data['close'].max()}"

In [14]: download_financial_data('IBM',date.today() - relativedelta(years=1),date.today())
download_financial_data('ORCL',date.today() - relativedelta(years=1),date.today())
download_financial_data('BLK',date.today() - relativedelta(years=1),date.today())

IBM.csv created
ORCL.csv created
BLK.csv created

In [15]: blk_df = pd.read_csv('BLK.csv')
ibm_df = pd.read_csv('IBM.csv')
orcl_df = pd.read_csv('ORCL.csv')

In [27]: print(f"IBM \n {financial_data_summary(ibm_df)}\n")
print(f"BlackRock \n {financial_data_summary(blk_df)}\n")
print(f"Oracle \n {financial_data_summary(orcl_df)}\n")

IBM
Average closing price: 134.36
Max closing price: 151.28
Min closing price: 115.81

BlackRock
Average closing price: 842.48
Max closing price: 971.49
Min closing price: 600.35

Oracle
Average closing price: 85.46
Max closing price: 103.65
Min closing price: 70.73
```