

153009012024

January 13, 2024

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[1]: import pandas as pd
import matplotlib.pyplot as plt
from ibapi.client import *
from ibapi.wrapper import *
import numpy as np
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[2]: class IBapi(EWrapper, EClient):
    def __init__(self):
        EClient.__init__(self, self)
        self.data = []

    def nextValidId(self, orderId: int):

        mycontract = Contract()
        mycontract.symbol = "AAPL"
        mycontract.secType = "STK"
        mycontract.exchange = "SMART"
        mycontract.currency = "USD"
        self.reqMarketDataType(3)

        self.reqHistoricalData(orderId, mycontract, '20230101 15:59:00 US/
↪Eastern', '1 W', '1 min', 'TRADES', 0, 1, 0, [])

    def historicalData(self, reqId, bar):
        self.data.append([bar.date, bar.close])
        app.disconnect()

app = IBapi()
app.connect('127.0.0.1', 7497, 123)
app.run()

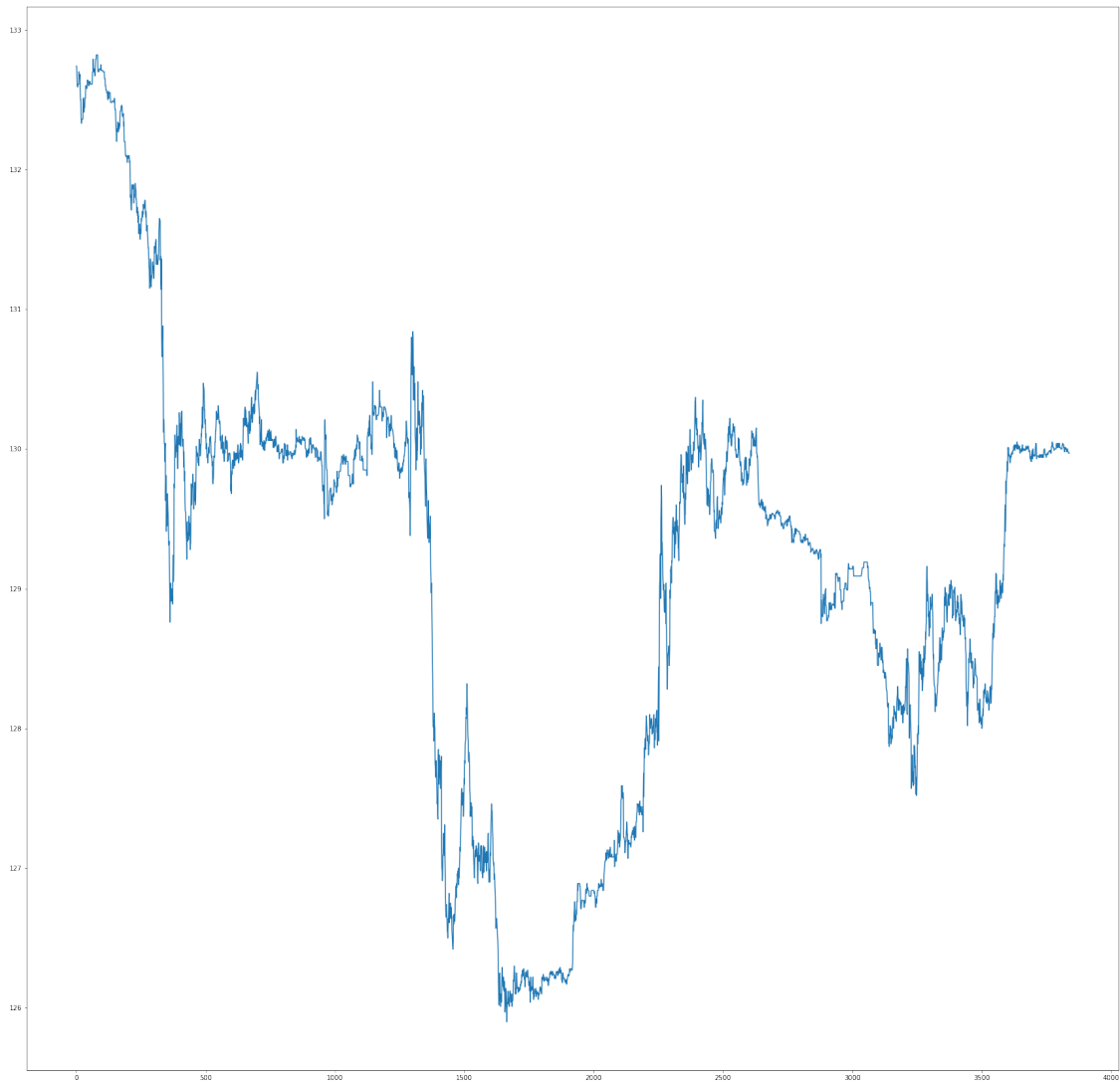
df = pd.DataFrame(app.data, columns=['DateTime', 'Close'])
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ERROR -1 2104 Market data farm connection is OK:usfarm.nj
ERROR -1 2104 Market data farm connection is OK:jfarm
ERROR -1 2104 Market data farm connection is OK:eufarm
ERROR -1 2104 Market data farm connection is OK:cashfarm
ERROR -1 2104 Market data farm connection is OK:usfarm
```

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ERROR -1 2106 HMDS data farm connection is OK:euHmDs
ERROR -1 2106 HMDS data farm connection is OK:uShmDs
ERROR -1 2158 Sec-def data farm connection is OK:SecDefil
```

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[3]: df['media mobile 1'] = df['Close'].rolling(window = 21, min_periods = 1, center_
      ↳ False).mean()
      df['media mobile 2'] = df['Close'].rolling(window = 100, min_periods = 1,
      ↳ center = False).mean()
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[4]: ax = df['Close'].plot(figsize=(30, 30))
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[5]: df["buy"] = 0
      buy_flag = False
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for i in range(len(df)):
    if not buy_flag and df.loc[i, "media mobile 1"] > df.loc[i, "media mobile_
↵2"]):
        df.loc[i, "buy"] = 'BUY'
        buy_flag = True
    elif buy_flag and df.loc[i, "media mobile 1"] <= df.loc[i, "media mobile_
↵2"]):
        df.loc[i, "buy"] = 0
        buy_flag = False

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[6]: df["sell"] = 0
    sell_flag = False

    for i in range(len(df)):
        if not sell_flag and df.loc[i, "media mobile 1"] < df.loc[i, "media mobile_
↵2"]):
            df.loc[i, "sell"] = 'SELL'
            sell_flag = True
        elif sell_flag and df.loc[i, "media mobile 1"] >= df.loc[i, "media mobile_
↵2"]):
            df.loc[i, "sell"] = 0
            sell_flag = False

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[7]: df["x"] = 0

    for i in range(len(df)):
        if df.loc[i, "buy"] == 'BUY':
            df.loc[i, "x"] = df.loc[i, "Close"]

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[8]: df["y"] = 0

    for i in range(len(df)):
        if df.loc[i, "sell"] == 'SELL':
            df.loc[i, "y"] = df.loc[i, "Close"]

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[ ]: pd.set_option('max_rows', None)
    print(df)

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[9]: comprato = df['x'].sum()

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[10]: comprato

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[10]: 3357.16

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[11]: venduto = df['y'].sum()

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[12]: venduto

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[12]: 3489.6400000000003

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