from luno\_python.client import Client

we use luno library to all apis of Luno SDK.

from selenium import webdriver

from selenium.webdriver.common.keys import Keys

from selenium.webdriver.common.by import By

from selenium.webdriver.chrome.service import Service

from webdriver\_manager.chrome import ChromeDriverManager

from selenium.webdriver.chrome.options import Options

we use selenium to get exchange rate for Euro to RAND from XE site.

saAccount = Client(api\_key\_id='bdc6udywrcxdy',

               api\_key\_secret='6QhflvPxdqrhRDo1VU-qw3sdZXwCLlTCOIGBWyOkfeY')

itAccount = Client(api\_key\_id='fngu2pkxv37wu',

               api\_key\_secret='Yc40rf1DBmXMP9GZ\_6orCEila7-iYCCwq2Ffv44bzzE')

saAccount is luno library that handles api to SouthAfrica account. (for RAND)

itAccoutn is luno library that handles api to Italy(UK) account. (for Euro)

saEmail = "Amasallia2012@gmail.com"

itEmail = "mattmeabtc@gmail.com"

saEmail is for SouthAfrica account email to send and receive BTC from Italy account

itEmail is for UK account email to send and receive BTC from SouthAfrica account

itTradeFee = 0.0001

saTradeFee = 0.0001

it’s useless for now

##### Pre test for accounts are ready #########

    res = saAccount.get\_balances()

    saBTC = ''

    saZAR = ''

    if res['balance']:

        for bal in res['balance']:

            if bal['asset'] == 'XBT':

                saBTC = bal['account\_id']

            elif bal['asset'] == 'ZAR':

                saZAR = bal['account\_id']

    res = itAccount.get\_balances()

    itBTC = ''

    itEuro = ''

    if res['balance']:

        for bal in res['balance']:

            if bal['asset'] == 'XBT':

                itBTC = bal['account\_id']

            elif bal['asset'] == 'EUR':

                itEuro = bal['account\_id']

    print(saBTC, saZAR, itBTC, itEuro)

    #######################

This is pre-test for SouthAfrica account and UK account have BTC and Euro and RAND balance so we can start to trading.

And the main logics start. The main logic is to looping every 5 mins.

 print("###Trading Loop Begin####", loopCount)

            loopCount+=1

            ## get exchange rate between zar and euro

            '''

            response = requests.get("https://xecdapi.xe.com/v1/convert\_from/?from=EUR&to=ZAR&amount=1", auth=HTTPBasicAuth('liming419944535', 'qajfi3hr0ug3g71ulc3n25ben8'))

            xrate = 0

            if response.status\_code == 200:

                xrateJson = response.json()

                xrate = float(xrateJson['to'][0]['mid'])

                print(xrate)

            else:

                print("Can't fetch exchange rate, wait until get exact exchange rate ....")

                continue

            '''

            driver.get("https://www.xe.com/currencyconverter/convert/?Amount=1&From=EUR&To=ZAR")

            value = driver.find\_element(By.CLASS\_NAME, 'iGrAod')

            price = value.text.replace("South African Rand", "")

            xrate = float(price)

            print("Exchange EURO-ZAR Rate:", xrate)

This is where to check the Exchange rate between Euro and RAND.