from selenium import webdriver

from selenium.webdriver.common.action\_chains import ActionChains

from selenium.webdriver.common.keys import Keys

from selenium.webdriver.support.ui import WebDriverWait

from PIL import Image

from pyocr import tesseract

import time

chrome\_path = r"C:\Users\X240\Desktop\chromedrive.exe"

options = webdriver.ChromeOptions()

options.add\_argument('enable-automation')

driver = webdriver.Chrome(chrome\_options=options)

url = r'https://index.baidu.com'

driver.implicitly\_wait(30)

driver.get(url)

driver.find\_element\_by\_xpath("""//\*[@id="userbar"]/ul/li[4]/a""").click()

emailFieldElement = WebDriverWait(driver,10).until(lambda driver : driver.find\_element\_by\_xpath("""//\*[@id="TANGRAM\_12\_\_userName"]"""))

passFieldElement = WebDriverWait(driver,10).until(lambda driver : driver.find\_element\_by\_xpath("""//\*[@id="TANGRAM\_12\_\_password"]"""))

#输入用户名和密码

userName = "294078290@qq.com"

password = "lanhou199681"

emailFieldElement.clear()

emailFieldElement.send\_keys(userName)

passFieldElement.clear()

passFieldElement.send\_keys(password)

driver.find\_element\_by\_xpath("""//\*[@id="TANGRAM\_12\_\_submit"]""").click()

driver.find\_element\_by\_xpath("""/html/body""").send\_keys(Keys.ENTER)

searchFieldElement = WebDriverWait(driver,10).until(lambda driver: driver.find\_element\_by\_xpath("""//\*[@id="schword"]"""))

searchFieldElement.clear()

searchFieldElement.send\_keys("艾滋病能活多久")

searchFieldElement.send\_keys(Keys.ENTER)

driver.maximize\_window()

xoyelement = driver.find\_elements\_by\_css\_selector("#trend rect")[2]

num = 0

x\_0 = 20 #采集样本点的鼠标坐标

y\_0 = 0

#模拟鼠标悬浮

ActionChains(driver).move\_to\_element\_with\_offset(xoyelement, x\_0, y\_0).perform()

time.sleep(2)

imgelement = driver.find\_element\_by\_xpath('//div[@id="viewbox"]')

# 找到图片坐标

locations = imgelement.location

print(locations)

# 找到图片大小

sizes = imgelement.size

print(sizes)

#初始化位置

init\_pos = 120

# 定位指定图片的位置

left = locations['x']

top = locations['y']

right = locations['x'] + sizes['width']

bottom = locations['y'] + sizes['height']

# 保存图片

driver.save\_screenshot("aids.png")

img = Image.open("aids.png")

#剪裁图片

img = img.crop((left,top-init\_pos,right,bottom-init\_pos))

img.show()

# 构造指数的位置

rangle = (int(sizes['width']\*7/13),int(sizes['height']/2),int(sizes['width']\*3/4),int(sizes['height']))

# 打开截图切割

jpg = img.crop(rangle)

# 将图片放大

(x, y) = jpg.size

x\_s = int(x\*1.2)

y\_s = int(y\*1.4)

jpgzoom = jpg.resize((x\_s,y\_s),Image.ANTIALIAS)

code = tesseract.image\_to\_string(jpgzoom)

print(code)