第11课 让爬虫定时向你汇报答案

题目要求:

• 根据已给出的网址爬取衢州的天气,爬取白天、夜间的温度、阴天或晴天数据具体数据位置见下面图片,红色框圈出来的是需要爬取的数据。将爬取到的数据写入到发送邮件模板中并定时每天早上八点,发送天气情况。

使用技术点引导

- requests
- BeautifulSoup
- smtplib
- email
- schedule
- time
- while循环
- 利用函数封装代码(选用)



导入模块

- import requests
- 3 from bs4 import BeautifulSoup
- 4 import smtplib
- from email.mime.text import MIMEText
- 6 from email.header import Header
- 7 import schedule
- 8 import time
- 18 # 输入邮箱发件人、收件人以及邮箱的授权码
- account = str(input('请输入发件人邮箱地址: '))
- password = str(input('请输入邮箱授权码: '))

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receiver = str(input('请输入收件人邮箱地址: '))
   # 建立天气网爬虫, 爬取天气信息
18
   def weather_spider():
       # 模拟浏览器:
       headers ={
           'user-agent' :'Mozilla/5.0 (Macintosh; Intel Mac OS X 10 13 6)
   AppleWebKit/537.36 (KHTML, like Gecko) Chrome/71.0.3578.98 Safari/537.36'
       url ='http://www.weather.com.cn/weather/101211001.shtml'
       # 数据获取:
       res =requests.get(url ,headers=headers)
       res.encoding ='utf-8'
       # 数据解析:
       soup =BeautifulSoup(res.text ,'html.parser')
       # 数据提取:
       tem1= soup.find(class_='tem')
       weather1= soup.find(class_='wea')
       tem =tem1.text
       weather =weather1.text
       print(tem1 ,weather)
       return tem ,weather
   # weather_spider()
   # #发送邮件的代码
   def send_email(tem,weather):
       mailhost='smtp.qq.com'
48
       qqmail = smtplib.SMTP()
       ggmail.connect(mailhost,25)
       qqmail.login(account,password)
       content= '衢州的天气是: \n'+tem+weather
       message = MIMEText(content, 'plain', 'utf-8')
       subject = '今日天气预报from python'
       message['Subject'] = Header(subject, 'utf-8')
       qqmail.sendmail(account, receiver, message.as_string())
       print ('邮件发送成功')
       qqmail.quit()
   #建立任务
   def job():
     print('开始一次任务')
     tem, weather = weather_spider()
     # print("发送邮件")
     send_email(tem,weather)
     print('任务完成')
   #定时发送
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   schedule.every().friday.at("14:43").do(job)
   while True:
     schedule.run_pending()
     time.sleep(1)
```