

8. Reading the Web Temperature Text File into Dictionary and Computing Average Temperature

8.1 Aim

- i) Write a program to Read web temperature from data file into dictionary and computing average temperature
- ii) Write a program to Access Web Pages

8.2 Software Used

1. Anaconda Navigator
2. Jupyter Notebook

8.3 Pre Lab Questions

1. What is the significance of urllib package?
2. Give the syntax for importing the web page data in to python program.
3. What does the following block of code do?

```
import urllib.request

fhand = urllib.request.urlopen('http://data.pr4e.org/romeo.txt')
for line in fhand:
    print(line.decode().strip())
```

- A. It creates a file named 'romeo.txt' in 'data.pr4e.org'
- B. It finds the urls linked to 'data.pr4e.org' and prints it.
- C. It opens a file named 'http://data.pr4e.org/romeo.txt' in local storage
- D. It prints the contents of 'romeo.txt' after retrieving it from 'data.pr4e.org'

8.4 Program

```
import urllib
import re
response = urllib.request.urlopen("http://weather.yahoo.com/forecast/NOXX0029_c.html")
html = response.read()
d={ }
s=[]
for i in html:
    d["Sunnyside"]=i
    s.append(i)
print("Average=")
print(sum(s)/len(s))
```

Output Response:

Average=83.45694053007217

Output:

```
import urllib
import re
response = urllib.request.urlopen("http://weather.yahoo.com/forecast/NOXX0029_c.html")
html = response.read()
d = {}
s = []
for i in html:
    d["Sunnyside"] = i
    s.append(i)
print('Average=')
print(sum(s)/len(s))
```

Average=
82.97753948843535

ii) Reading HTML file Using urllib

PROGRAM:

```
import urllib
import re
response = urllib.request.urlopen("http://weather.yahoo.com/forecast/NOXX0029_c.html")
html = response.read()
print(html)
```

OUTPUT:

```
b'<!DOCTYPE html><html id="atomic" class="NoJs desktop" lang="en-US"><head
prefix="og: http://ogp.me/ns#"><script>window.performance&& window.performance.mark
&& window.performance.mark('\PageStart\');</script><meta charset="utf-8"/><meta http-
equiv="x-dns-prefetch-control" content="on"/><meta name="apple-itunes-app"
content="app-id=628677149"/><meta name="render-optimize-policy" content="first-screen-
advance;enable"/><meta name="referrer" content="unsafe-url"/><meta
name="oath:guce:consent-host" content="guce.yahoo.com"/><meta
name="twitter:description" content="View the latest weather forecasts, maps, news and alerts
on Yahoo Weather. Find local weather forecasts for Sunnyvale, United States throughout the
world"/><meta name="twitter:title" content="Sunnyvale, United States - Weather Forecasts |
Maps | News - Yahoo Weather"/><meta name="description" content="View the latest
weather forecasts, maps, news and alerts on Yahoo Weather. Find local weather forecasts for
Sunnyvale, United States throughout the world"/><meta name="keywords" content="weather
forecasts, weather reports, weather maps, Sunnyvale, United States weather forecast,
worldwide weather forecast, local weather forecast, 5 day forecasts, 10 day forecasts, news,
weather alerts, yahoo weather, yahoo"/><meta property="al:android:package"
content="com.yahoo.mobile.client.android.weather"/><meta property="og:description"
content="View the latest weather forecasts, maps, news and alerts on Yahoo Weather. Find
local weather forecasts for Sunnyvale, United States throughout the world"/
```

Output:

```
import urllib
import re
response = urllib.request.urlopen("http://weather.yahoo.com/forecast/NOXX0029_c.html")
html = response.read()
print(html)
```

```
b'<!DOCTYPE html><html id="atomic" class="NoJs desktop" lang="en-US"><head prefix="og: http://ogp.me/ns#"><script>window
cript><meta charset="utf-8"/><meta http-equiv="x-dns-prefetch-control" content="on"/><meta name="apple-itunes-app" conte
-optimize-policy" content="first-screen-advance;enable"/><meta name="oath:guce:consent-host" content="guce.yahoo.com"/><
s and alerts on Yahoo Weather. Find local weather forecasts for Sunnyvale, United States throughout the world"/><meta na
s - Yahoo Weather"/><meta name="description" content="View the latest weather forecasts, maps, news and alerts on Yahoo
ld"/><meta name="keywords" content="weather forecasts, weather reports, weather maps, Sunnyvale, United States weather f
forecasts, news, weather alerts, yahoo weather, yahoo"/><meta property="al:android:package" content="com.yahoo.mobile.c
er forecasts, maps, news and alerts on Yahoo Weather. Find local weather forecasts for Sunnyvale, United States through
Forecasts | Maps | News - Yahoo Weather"/><link href="//s.yimg.com" rel="dns-prefetch"/><link href="//geo.yahoo.com" rel
="//beap.gemini.yahoo.com" rel="dns-prefetch"/><link href="//yep.video.yahoo.com" rel="dns-prefetch"/><link href="//vide
<link href="//geo.yahoo.com" rel="preconnect"/><link href="//consent.cmp.oath.com" rel="preconnect"/><link href="//beap.
t"/><link href="//video-api.yql.yahoo.com" rel="preconnect"/><link href="https://s.yimg.com/os/mit/media/p/common/image:
piv2/default/fp/20180826/icons/favicon_y19_32x32.ico" rel="icon" type="image/x-icon"/><link as="image" href="https://s.y
yahoo.com/news/weather/forecast/NOXX0029_c/" rel="canonical"/><title>Sunnyvale, United States - Weather Forecasts | Maps
rops/colors_1.1.22.min.css"/><link rel="stylesheet" href="https://s.yimg.com/aaq/news/css/custom.1719e2de.css"/><link re
stylesheet" href="https://s.yimg.com/aaq/news/css/atomic-desktop-ltr-0.8c7c4400.css"/><link rel="stylesheet" href="https:
ef="https://s.yimg.com/aaq/news/css/atomic-context.3bb2edfe.css"/><link rel="stylesheet" href="https://s.yimg.com/aaq/yc
theme.2f876e26.css"/><link rel="stylesheet" href="https://s.yimg.com/aaq/yc/css/fuji-rollup.min.901f71a2.css"/><link rel
pt src="https://s.yimg.com/aaq/yc/2.9.0/en.js"></script><script src="https://s.yimg.com/ss/rapid-3.53.37.js"></script><:
ps://s.yimg.com/aaq/news/js/vendor.b0037b6336775de18d9c.min.js" defer=""></script><script src="https://s.yimg.com/aaq/ne
ent.cmp.oath.com/cmpStub.min.js"></script><script src="https://consent.cmp.oath.com/cmp.js" async=""></script><script>!f
s;!0,enableJSClass:!0,usePrefixes:!0},_q:[],on:function(e,t){var n=this;setTimeout(function(){t(n[e])},0)},addTest:funct
l,fn:e}}},l=function(){l.prototype=t,l=new l;var d=[];function v(e,t){return typeof e===t}var n="Moz 0 ms Webkit",c=t
g"===y.nodeName.toLowerCase();function h(){return"function"!==typeof f.createElement?f.createElement(arguments[0]):m?f.cr
```

8.5 Post Lab Questions

1. How to get the response of the average temperature in the form of html. Give a sample.

8.6 Result

Write a program to Read web temperature from data file into dictionary, computing average temperature and also write a program to Access Web Pages