

ML_8_nltk

March 26, 2019

In [1]: *"""In this assignment students have to find the frequency of words in a webpage. User use urllib and BeautifulSoup to extract text from webpage.*

Hint:

```
from bs4 import BeautifulSoup
import urllib.request
import nltk
```

```
response = urllib.request.urlopen('http://php.net/')
html = response.read()
soup = BeautifulSoup(html, "html5lib")"""
```

Importing and reading the text from the webpage

```
import numpy as np
import pandas as pd
from bs4 import BeautifulSoup
import urllib.request
import nltk
```

```
response = urllib.request.urlopen('http://php.net/')
html = response.read()
soup = BeautifulSoup(html, "html5lib")
text = soup.get_text(strip=True)
print (text)
```

PHP: Hypertext PreprocessorDownloadsDocumentationGet InvolvedHelpGetting StartedIntroductionA
7.1.27. This is a security release which also contains several bug fixes.All PHP 7.1 use
Windows source and binaries can be found onwindows.php.net/download/.
The list of changes is recorded in the[ChangeLog](#).07 Mar 2019PHP 7.2.16 ReleasedThe PHP de
7.2.16. This is a security release which also contains several minor bug fixes.All PHP 7.2
Windows source and binaries can be found onwindows.php.net/download/.
The list of changes is recorded in the[ChangeLog](#).07 Mar 2019PHP 7.3.3 ReleasedThe PHP deve
7.3.3. This is a security release which also contains several bug fixes.All PHP 7.3 users
Windows source and binaries can be found onwindows.php.net/download/.
The list of changes is recorded in the[ChangeLog](#).07 Feb 2019PHP 7.2.15 ReleasedThe PHP de
This is a bugfix release.All PHP 7.2 users are encouraged to upgrade to this version.For
Windows source and binaries can be found onwindows.php.net/download/.

The list of changes is recorded in theChangeLog.07 Feb 2019PHP 7.3.2 Release Announcement
7.3.2. This is a bugfix release, with several bug fixes included.All PHP 7.3 users are encouraged to upgrade.
Windows source and binaries can be found onwindows.php.net/download/.

The list of changes is recorded in theChangeLog.10 Jan 2019PHP 5.6.40 ReleasedThe PHP development team has released PHP 5.6.40. This is a security release. Several security bugs have been fixed in this release.

All PHP 5.6 users are encouraged to upgrade to this version.For source downloads of PHP 5.6.40, see the PHP website.
Windows source and binaries can be found onwindows.php.net/download/.

The list of changes is recorded in theChangeLog.Please note that according to thePHP version support timelines,

PHP 5.6.40 is the last scheduled release of PHP 5.6 branch. There may be additional releases if we discover

important security issues that warrant it, otherwise this release will be the final one for the 5.6 branch.

If your PHP installation is based on PHP 5.6, it may be a good time to start making the upgrade

to PHP 7.1, PHP 7.2 or PHP 7.3.22 Nov 2018PHP 7.3.0RC6 ReleasedThe PHP team is glad to announce the release of PHP 7.3.0RC6. The rough outline of the PHP 7.3 release cycle is specified in thePHP Wiki.For source code and Windows sources and binaries can be found onwindows.php.net/qa/.Please carefully test the upgrade or theUPGRADINGfile for a complete list of upgrading notes. Internal changes are listed in theUPGRADINGfile. These files can also be found in the release archive.The next release would be 7.3.0 (RC6). The rough outline of the PHP 7.3 release cycle is specified in thePHP Wiki.For source code and Windows sources and binaries can be found onwindows.php.net/qa/.Please carefully test the upgrade or theUPGRADINGfile for a complete list of upgrading notes. Internal changes are listed in theUPGRADINGfile. These files can also be found in the release archive.The next release would be RC6, planned for early 2019. The rough outline of the PHP 7.3 release cycle is specified in thePHP Wiki.For source code and Windows sources and binaries can be found onwindows.php.net/qa/.Please carefully test the upgrade or theUPGRADINGfile for a complete list of upgrading notes. Internal changes are listed in theUPGRADINGfile. These files can also be found in the release archive.The next release would be RC5, planned for early 2019. The rough outline of the PHP 7.3 release cycle is specified in thePHP Wiki.For source code and Windows sources and binaries can be found onwindows.php.net/qa/.Please carefully test the upgrade or theUPGRADINGfile for a complete list of upgrading notes. Internal changes are listed in theUPGRADINGfile. These files can also be found in the release archive.The next release would be RC4, planned for early 2019. The rough outline of the PHP 7.3 release cycle is specified in thePHP Wiki.For source code and Windows sources and binaries can be found onwindows.php.net/qa/.Please carefully test the upgrade or theUPGRADINGfile for a complete list of upgrading notes. Internal changes are listed in theUPGRADINGfile. These files can also be found in the release archive.The next release would be RC3, planned for early 2019. The rough outline of the PHP 7.3 release cycle is specified in thePHP Wiki.For source code and Windows sources and binaries can be found onwindows.php.net/qa/.Please carefully test the upgrade or theUPGRADINGfile for a complete list of upgrading notes. Internal changes are listed in theUPGRADINGfile. These files can also be found in the release archive.The next release would be RC2, planned for early 2019. The rough outline of the PHP 7.3 release cycle is specified in thePHP Wiki.For source code and Windows sources and binaries can be found onwindows.php.net/qa/.Please carefully test the upgrade or theUPGRADINGfile for a complete list of upgrading notes. Internal changes are listed in theUPGRADINGfile. These files can also be found in the release archive.The next release would be RC1, planned for early 2019. The rough outline of the PHP 7.3 release cycle is specified in thePHP Wiki.For source code and Windows sources and binaries can be found onwindows.php.net/qa/.Please carefully test the upgrade or theUPGRADINGfile for a complete list of upgrading notes. Internal changes are listed in theUPGRADINGfile. These files can also be found in the release archive.


```
In [2]: # Tokenization
```

```
tokens = [t for t in text.split()]  
print (tokens)
```

```
['PHP:', 'Hypertext', 'PreprocessorDownloadsDocumentationGet', 'InvolvedHelpGetting', 'StartedIntroductionA', 'Simple', 'TutorialLanguage', 'ReferenceBasic', 'SyntaxTypesVariablesConstantsExpressionsOperatorsControl', 'StructuresFunctionsClasses', 'and', 'ObjectsNamespacesErrorsExceptionsGeneratorsReferences', 'ExplainedPredefined', 'VariablesPredefined', 'ExceptionsPredefined', 'Interfaces', 'ClassesContext', 'options', 'parametersSupported', 'Protocols', 'WrappersSecurityIntroductionGeneral', 'considerationsInstalled', 'as', 'CGI', 'binaryInstalled', 'an', 'Apache', 'moduleSession', 'SecurityFilesystem', 'SecurityDatabase', 'SecurityError', 'ReportingUsing', 'Register']
```

```
In [3]: # Distribution of frequency from nltk.FreqDist()
```

```
freq = nltk.FreqDist(tokens)  
for key, val in freq.items():  
    print (str(key) + ':' + str(val))
```

```
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media@official_phpCopyright:1
I:1
2001-2019:1
GroupMy:1
PHP.netContactOther:1
PHP.net:1
sitesMirror:1
sitesPrivacy:1
policy:1
```

```
In [5]: # Visualization of frequency distribution
```

```
import matplotlib.pyplot as plt
freq.plot(20, cumulative=False)
plt.show()
```

