In [1]:

```
from bs4 import BeautifulSoup
import urllib.request
import nltk
nltk.download('stopwords')
```

Out[1]:

True

In [*]:

We will use beautiful soup to crawl our webpage text of HTML tags.

In [2]:

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

b'<!DOCTYPE html>\n<html xmlns="http://www.w3.org/1999/xhtml" lang="en">\n <head>\n\n <meta charset="utf-8">\n <meta name="viewport" content="width</pre> =device-width, initial-scale=1.0">\n\n <title>PHP: Hypertext Preprocessor </title>\n\n <link rel="shortcut icon" href="https://www.php.net/favicon.i co">\n <link rel="search" type="application/opensearchdescription+xml" hre</pre> f="http://php.net/phpnetimprovedsearch.src" title="Add PHP.net search">\n <link rel="alternate" type="application/atom+xml" href="https://www.php.ne</pre> t/releases/feed.php" title="PHP Release feed">\n <link rel="alternate" typ e="application/atom+xml" href="https://www.php.net/feed.atom" title="PHP: Hypertext Preprocessor">\n\n <link rel="canonical" href="https://www.php.n</pre> et/index.php">\n <link rel="shorturl" href="https://www.php.net/index">\n <link rel="alternate" href="https://www.php.net/index" hreflang="x-defaul</pre> t">\n\n\nrel="stylesheet" type="text/css" href="/cached.php?t=1539 771603&f=/fonts/Fira/fira.css" media="screen">\n<link rel="stylesheet" type="text/css" href="/cached.php?t=1539765004&f=/fonts/Font-Awesome/c ss/fontello.css" media="screen">\n<link rel="stylesheet" type="text/css" h ref="/cached.php?t=1540425603&f=/styles/theme-base.css" media="scree" n">\n<link rel="stylesheet" type="text/css" href="/cached.php?t=1540425603 &f=/styles/theme-medium.css" media="screen">\n<link rel="stylesheet" t</pre>

In [3]:

```
text = soup.get_text(strip = True)
print(text)
```

PHP: Hypertext PreprocessorDownloadsDocumentationGet InvolvedHelpGetting S tartedIntroductionA simple tutorialLanguage ReferenceBasic syntaxTypesVari ablesConstantsExpressionsOperatorsControl StructuresFunctionsClasses and O bjectsNamespacesErrorsExceptionsGeneratorsReferences ExplainedPredefined V ariablesPredefined ExceptionsPredefined Interfaces and ClassesContext opti ons and parametersSupported Protocols and WrappersSecurityIntroductionGene ral considerationsInstalled as CGI binaryInstalled as an Apache moduleSess ion SecurityFilesystem SecurityDatabase SecurityError ReportingUsing Regis ter GlobalsUser Submitted DataMagic QuotesHiding PHPKeeping CurrentFeature SHTTP authentication with PHPCookiesSessionsDealing with XFormsHandling fi le uploadsUsing remote filesConnection handlingPersistent Database Connect ionsSafe ModeCommand line usageGarbage CollectionDTrace Dynamic TracingFun ction ReferenceAffecting PHP's BehaviourAudio Formats ManipulationAuthenti cation ServicesCommand Line Specific ExtensionsCompression and Archive Ext ensionsCredit Card ProcessingCryptography ExtensionsDatabase ExtensionsDat e and Time Related ExtensionsFile System Related ExtensionsHuman Language and Character Encoding SupportImage Processing and GenerationMail Related ExtensionsMathematical ExtensionsNon-Text MIME OutputProcess Control Exten sionsOther Basic ExtensionsOther ServicesSearch Engine ExtensionsServer Sp

In [4]:

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

['PHP:', 'Hypertext', 'PreprocessorDownloadsDocumentationGet', 'InvolvedHe lpGetting', 'StartedIntroductionA', 'simple', 'tutorialLanguage', 'Referen ceBasic', 'syntaxTypesVariablesConstantsExpressionsOperatorsControl', 'Str ucturesFunctionsClasses', 'and', 'ObjectsNamespacesErrorsExceptionsGenerat orsReferences', 'ExplainedPredefined', 'VariablesPredefined', 'ExceptionsP redefined', 'Interfaces', 'and', 'ClassesContext', 'options', 'and', 'para metersSupported', 'Protocols', 'and', 'WrappersSecurityIntroductionGenera
l', 'considerationsInstalled', 'as', 'CGI', 'binaryInstalled', 'as', 'an', 'Apache', 'moduleSession', 'SecurityFilesystem', 'SecurityDatabase', 'Secu rityError', 'ReportingUsing', 'Register', 'GlobalsUser', 'Submitted', 'Dat aMagic', 'QuotesHiding', 'PHPKeeping', 'CurrentFeaturesHTTP', 'authenticat ion', 'with', 'PHPCookiesSessionsDealing', 'with', 'XFormsHandling', 'fil e', 'uploadsUsing', 'remote', 'filesConnection', 'handlingPersistent', 'Da tabase', 'ConnectionsSafe', 'ModeCommand', 'line', 'usageGarbage', 'Collec tionDTrace', 'Dynamic', 'TracingFunction', 'ReferenceAffecting', "PHP's", 'BehaviourAudio', 'Formats', 'ManipulationAuthentication', 'ServicesComman d', 'Line', 'Specific', 'ExtensionsCompression', 'and', 'Archive', 'Extens ionsCredit', 'Card', 'ProcessingCryptography', 'ExtensionsDatabase', 'ExtensionsDate', 'and', 'Time', 'Related', 'ExtensionsFile', 'System', 'Related', 'Relat احتجا الاحتجاجات

Count word Frequency

In [6]:

```
from nltk.corpus import stopwords
sr= stopwords.words('english')
clean_tokens = tokens[:]
for token in tokens:
    if token in stopwords.words('english'):
        clean_tokens.remove(token)
freq = nltk.FreqDist(clean_tokens)
for key,val in freq.items():
    print(str(key) + ':' + str(val))
freq.plot(20, cumulative=False)
PHP::1
Hypertext:1
PreprocessorDownloadsDocumentationGet:1
InvolvedHelpGetting:1
StartedIntroductionA:1
simple:1
tutorialLanguage:1
ReferenceBasic:1
syntaxTypesVariablesConstantsExpressionsOperatorsControl:1
StructuresFunctionsClasses:1
ObjectsNamespacesErrorsExceptionsGeneratorsReferences:1
ExplainedPredefined:1
VariablesPredefined:1
ExceptionsPredefined:1
Interfaces:1
ClassesContext:1
options:1
parametersSupported:1
Protocols:1
WrappersSecurityIntroductionGeneral:1
considerationsInstalled:1
CGI:1
binaryInstalled:1
Apache:1
moduleSession:1
SecurityFilesystem:1
SecurityDatabase:1
SecurityError:1
ReportingUsing:1
Register:1
GlobalsUser:1
Submitted:1
DataMagic:1
QuotesHiding:1
PHPKeeping:1
CurrentFeaturesHTTP:1
authentication:1
PHPCookiesSessionsDealing:1
XFormsHandling:1
file:1
uploadsUsing:1
remote:1
filesConnection:1
handlingPersistent:1
Database:1
ConnectionsSafe:1
```

ModeCommand:1

line:1

usageGarbage:1
CollectionDTrace:1

Dynamic:1

TracingFunction:1
ReferenceAffecting:1

PHP's:1

BehaviourAudio:1

Formats:1

ManipulationAuthentication:1

ServicesCommand:1

Line:1
Specific:2

ExtensionsCompression:1

Archive:1

ExtensionsCredit:1

Card:1

ProcessingCryptography:1 ExtensionsDatabase:1

ExtensionsDate:1

Time:1
Related:4

ExtensionsFile:1

System:1

ExtensionsHuman:1

Language:1 Character:1 Encoding:1 SupportImage:1 Processing:1 GenerationMail:1

ExtensionsMathematical:1

ExtensionsNon-Text:1

MIME:1

OutputProcess:1

Control:1

ExtensionsOther:2

Basic:1

ServicesSearch:1

Engine:1

ExtensionsServer:1 ExtensionsSession:1 ExtensionsText:1 ProcessingVariable:1

Type:1

ExtensionsWeb:1
ServicesWindows:1

Only:1

ExtensionsXML:1
ManipulationGUI:1
ExtensionsKeyboard:1

Shortcuts?This:1
helpjNext:1

menu:2

itemkPrevious:1

itemg:1
pPrevious:1
man:2

pageg:1
nNext:1

pageGScroll:1

```
bottomg:1
gScroll:1
topg:1
hGoto:1
homepageg:1
sGoto:1
search(current:1
page)/Focus:1
search:1
boxPHP:1
popular:2
general-purpose:1
scripting:1
language:1
especially:1
suited:1
web:1
development.Fast,:1
flexible:1
pragmatic,:1
PHP:133
powers:1
everything:1
blog:1
websites:1
world.Download7.1.28 · Release:1
Notes · Upgrading 7.2.17 · Release: 1
Notes · Upgrading 7.3.4 · Release: 1
Notes · Upgrading 04:1
Apr:3
2019PHP:6
7.1.28:2
ReleasedThe:22
development:12
team:25
announces:12
immediate:12
availability:12
7.1.28.:1
This:13
security:6
release.All:1
7.1:2
users:12
encouraged:12
upgrade:7
version.For:8
source:32
downloads:25
please:25
visit:25
ourdownloads:7
page,:7
Windows:24
binaries:24
found:68
onwindows.php.net/download/.:7
The:20
list:30
changes:15
recorded:7
```

```
theChangeLog.04:2
7.2.17:2
Release:16
AnnouncementThe: 2
7.2.17.:1
release:75
also:28
contains:6
several:6
minor:2
bug:6
fixes.All:5
7.2:3
7.3.4:2
7.3.4.:1
7.3:15
theChangeLog.07:3
Mar:3
7.1.27:2
7.1.27.:1
7.2.16:2
7.2.16.:1
7.3.3:2
7.3.3.:1
theChangeLog.22:1
Nov:2
2018PHP:14
7.3.0RC6:2
glad:13
announce:13
presumably:1
last:1
7.3.0:23
pre-release,:6
7.3.0RC6.:1
rough:13
outline:13
cycle:12
specified:13
thePHP:13
Wiki.For:13
thedownload:13
page.:12
sources:17
onwindows.php.net/qa/.Please:12
carefully:13
test:19
version:19
report:18
issues:13
thebug:18
reporting:13
system.THIS:17
IS:17
A:17
DEVELOPMENT:17
PREVIEW:17
-:17
DO:18
NOT:18
USE:17
```

IT:17 IN:17

PRODUCTION!For:17

information:18

new:18

features:18

changes,:18

read:23

theNEWSfile,:18

theUPGRADINGfile:18

complete:18

upgrading:18

notes.:18

Internal:8

listed:8

theUPGRADING.INTERNALSfile.:8

These:18

files:18

archive.The:13

next:20

would:13

(GA),:1

planned:18

December:1

6th.The:1

signatures:13

inthe:13

manifestor:13

onthe:13

QA:13

site.Thank:13

helping:18

us:18

make:18

better.08:1

7.3.0RC5:2

7.3.0RC5.:1

RC6,:1

November: 2

22nd.The:1

better.25:1

Oct:3

7.3.0RC4:2

7.3.0RC4.:1

RC5,:1

8th.The:1

better.11:1

7.3.0RC3:2

7.3.0RC3.:1

RC4,:1

October:2

25th.The:1

better.28:2

Sep:3

7.3.0RC2:2

7.3.0RC2.:1

RC3,:1

11th.The:1

better.13:1

7.3.0RC1:2

7.3.0RC1.:1

RC2,:1

September:2

27th.The:1

better.30:1

Aug:5

7.3.0.beta3:1

seventh:1

version,:7

7.3.0beta3.:1

7.3.0beta3:1

RC1,:1

13th.The:1

better.16:1

7.3.0.beta2:1

sixth:1

7.3.0beta2.:1

7.3.0beta2:1

Beta:7

3,:2

August:3

30th.The:1

better.02:1

7.3.0.beta1:1

fifth:1

7.3.0beta1.:1

7.3.0beta1:1

2,:2

16th.The:1

better.19:1

Jul:3

7.3.0alpha4:2

fourth:2

7.3.0alpha4.:1

1,:2

2nd.The:1

better.05:1

alpha:3

3:8

third:3

Alpha:12

3.:3

July:2

19th.The:1

better.21:1

Jun:2

2:2

second:2

2.:2

5.The:1

better.07:1

1:4

ReleasedPHP:1

first:4

1.:2

starts:1

cycle,:1

page.Please:1

system.Please:1

use:1

production,:1

early:1

14/04/2019 June:1 21.The:1 better.01:1 Feb:1 7.2.2:2 7.2.2.:1 bugfix:1 release,:1 fixes:2 included.All:1 theChangeLog.12:1 2017PHP:5 7.2.0:15 Candidate:14 4:2 RC4.:1 7.2.0.:4 A11:5 carefully,:5 bugs:5 incompatibilities:5 tracking:5 archive.For:5 thedownloadpage,:5 atwindows.php.net/qa/.The:4 announced:2 26th:1 October.:2 You:5 full:5 releases:5 onour:4 wiki.Thank:4 RC3.:1 12th:1 better.31:1 released:3 14th:1 September.:1 better.17:1 final:1 beta:2 31th:1 August.:1 better.06:1 improvements:1 relative:1 onwindows.php.net/qa/.The:1 20th:1 July.:1 ourwiki.Thank:1 better.Older:1 News:1 EntriesUpcoming:1 conferencesPHPConf.Asia:1 2019SymfonyCon:1 Amsterdam:1 2019SymfonyLive:2 Berlin:1 London:1 2019Conferences:1

calling:1

papersBulgaria:1
Conference:1
2019User:1
Group:1

EventsSpecial:1
ThanksSocial:1

media@official_phpCopyright:1

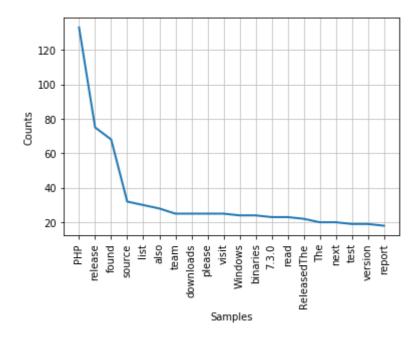
0:1

2001-2019:1 GroupMy:1

PHP.netContactOther:1

PHP.net:1 sitesPrivacy:1

policy:1



In []:

Hence 'PHP' is the most frequent word