


URL Scraper Wikipedia

Automation script which fetch URL from Wikipedia using BeautifulSoup.

```
1 import os
2 import bs4
3 import requests
4 from sys import *
5
6 def MarvellousLinksDisplay(URL):
7     res = requests.get(URL)
8     print(type(res))
9
10    soup = bs4.BeautifulSoup(res.text,'lxml')
11    print(type(soup))
12
13    links = soup.find_all('a', href = True)
14
15    return links
16
17 def main():
18     print("----- Marvellous Infosystems by Piyush Khairnar-----")
19
20     print("Application name : " +argv[0])
21
22     if (len(argv) == 2):
23         if (argv[1] == "-h" or (argv[1] == "-H")):
24             print("This Script is used to fetch links from wikipedia file")
25             exit()
26
27         if (argv[1] == "-u" or (argv[1] == "-U")):
28             print("usage : ApplicationName")
29             exit()
30
31     url = "https://en.wikipedia.org/wiki/Python_(programming_language)"
32
33     arr = MarvellousLinksDisplay(url)
34
35     print("Links are ")
36
37     for element in arr:
38         if "#" not in element['href']:
39             print(element['href'])
40
41 if __name__ == "__main__":
42     main()
43
```

Web page of the targeted Wikipedia page



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Python (programming language)

From Wikipedia, the free encyclopedia

Python is an [interpreted, high-level, general-purpose programming language](#). Created by [Guido van Rossum](#) and first released in 1991, Python has a design philosophy that emphasizes [code readability](#), notably using [significant whitespace](#). It provides constructs that enable clear programming on both small and large scales.^[26] Van Rossum led the language community until July 2018.^{[27][28]}

Python is [dynamically typed](#) and [garbage-collected](#). It supports multiple [programming paradigms](#), including [procedural](#), [object-oriented](#), and [functional programming](#). Python features a comprehensive [standard library](#), and is referred to as "batteries included".^[29]

Python interpreters are available for many [operating systems](#). CPython, the [reference implementation](#) of Python, is [open-source software](#)^[30] and has a community-based development model. Python and CPython are managed by the non-profit [Python Software Foundation](#).

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History [edit]

Main article: [History of Python](#)

Python was conceived in the late 1980s^[31] by [Guido van Rossum](#) at [Centrum Wiskunde & Informatica](#) (CWI) in the [Netherlands](#) as a successor to the [ABC language](#) (itself inspired by [SETL](#))^[32], capable of [exception handling](#) and interfacing with the [Amoeba](#) operating system.^[7] Its implementation began in December 1989.^[33] Van Rossum's long influence on Python is reflected in the title given to him by the Python community: *Benevolent Dictator For Life* (BDFL) – a post from which he gave himself permanent vacation on July 12, 2018.^[34]

Python 2.0 was released on 16 October 2000 with many major new features, including a [cycle-detecting garbage collector](#) and support for [Unicode](#).^[35]

Python 3.0 was released on 3 December 2008. It was a major revision of the language that is not completely [backward-compatible](#).^[36] Many of its major features were [backported](#) to Python 2.6.x^[37] and 2.7.x version series. Releases of Python 3 include the `2to3` utility, which automates (at least partially) the translation of Python 2 code to Python 3.^[38]

Python 2.7's *end-of-life* date was initially set at 2015 then postponed to 2020 out of concern that a large body of existing code could not easily be forward-ported to Python 3.^{[39][40]} In January 2017, Google announced work on a Python 2.7 to [Go transcompiler](#) to improve performance under concurrent workloads.^[41]

Features and philosophy [edit]

Python is a [multi-paradigm programming language](#). [Object-oriented programming](#) and [structured programming](#) are fully supported, and many of its features support [functional programming](#) and [aspect-oriented programming](#) (including by [metaprogramming](#)^[42] and [metaobjects](#) (magic methods)).^[43] Many other paradigms are supported via extensions, including [design by contract](#)^{[44][45]} and [logic programming](#).^[46]

Python uses [dynamic typing](#), and a combination of [reference counting](#) and a cycle-detecting garbage collector for [memory management](#). It also features dynamic [name resolution](#) (late binding), which binds method and variable names during program execution.

Python's design offers some support for [functional programming](#) in the [Lisp](#) tradition. It has `filter`, `map`, and `reduce` functions; [list comprehensions](#), [dictionaries](#), [sets](#) and [generator expressions](#).^[47] The standard library has two modules (`itertools` and `functools`) that implement functional tools borrowed from [Haskell](#) and [Standard ML](#).^[48]


The language's core philosophy is summarized in the document *The Zen of Python* ([PEP 20](#)), which includes [aphorisms](#) such as:^[49]


- Beautiful is better than ugly
- Explicit is better than implicit
- Simple is better than complex
- Complex is better than complicated
- Readability counts


Rather than having all of its functionality built into its core, Python was designed to be highly [extensible](#). This compact modularity has made it particularly popular as a means of adding programmable interfaces to existing applications. Van Rossum's vision of a small core language with a large standard library and easily extensible interpreter stemmed from his frustrations with [ABC](#), which espoused the opposite approach.^[31]


While offering choice in coding methodology, the Python philosophy rejects exuberant syntax (such as that of [Perl](#)) in favor of a simpler, less-cluttered grammar. As [Alex Martelli](#) put it: "To describe something as 'clever' is *not* considered a compliment in the Python culture."^[50] Python's philosophy rejects the Perl "[there is more than one way to do it](#)" approach to language design in favor of

Python



Paradigm	Multi-paradigm: functional, imperative, object-oriented, reflective
Designed by	Guido van Rossum
Developer	Python Software Foundation
First appeared	1990; 29 years ago ^[1]
Stable release	3.7.3 / 25 March 2019; 32 days ago ^[2] 2.7.16 / 3 March 2019; 54 days ago ^[3]
Typing discipline	Duck, dynamic, gradual (since 3.5) ^[4]
License	Python Software Foundation License
Filename extensions	.py, .pyc, .pyd, .pyo (prior to 3.5), ^[5] .pyw, .pyz (since 3.5) ^[6]
Website	www.python.org 
Major implementations	
CPython, PyPy, Stackless Python, MicroPython, CircuitPython, IronPython, Jython	
Dialects	
Cython, RPython	
Influenced by	
ABC, ^[7] ALGOL 68, ^[8] APL ^[9] C, ^[10] C++ ^[11] CLU, ^[12] Dylan, ^[13] Haskell, ^[14] Icon, ^[15]	



Guido van Rossum at OSCON 2006. 

Output of above script

----- Marvellous Infosystems by Piyush Khairnar-----

Application name : WebScapingLinksDisplay.py

```
<class 'requests.models.Response'>
```

```
<class 'bs4.BeautifulSoup'>
```

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