

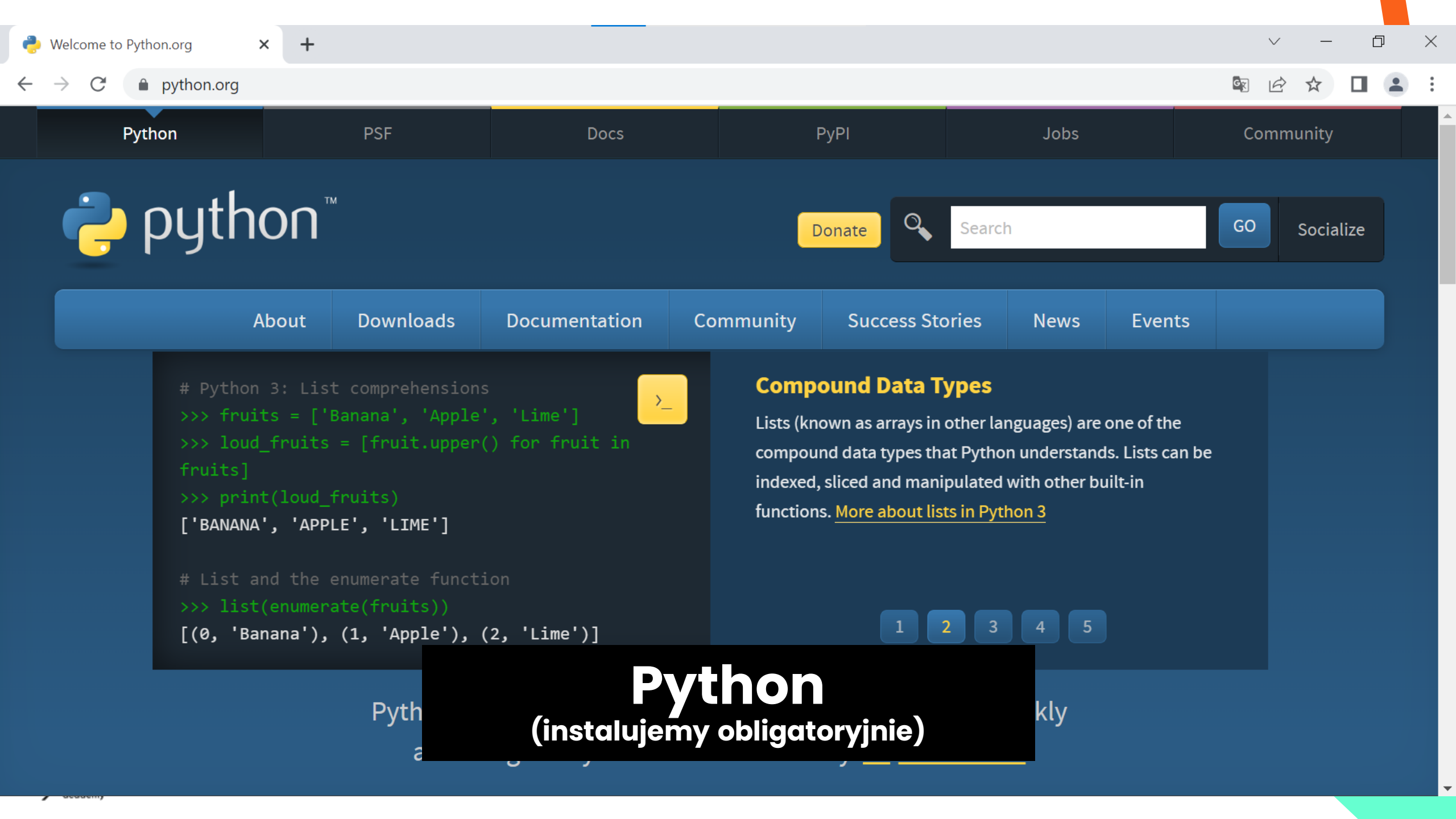
Wstęp do programowania w języku Python



Real Python



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```
# Python 3: List comprehensions
>>> fruits = ['Banana', 'Apple', 'Lime']
>>> loud_fruits = [fruit.upper() for fruit in fruits]
>>> print(loud_fruits)
['BANANA', 'APPLE', 'LIME']
```



```
# List and the enumerate function
>>> list(enumerate(fruits))
[(0, 'Banana'), (1, 'Apple'), (2, 'Lime')]
```

Compound Data Types

Lists (known as arrays in other languages) are one of the compound data types that Python understands. Lists can be indexed, sliced and manipulated with other built-in functions. [More about lists in Python 3](#)

1

2

3

4

5

Python
(instalujemy obligatoryjnie)

PyCharm

What's New Features Learn Pricing [Download](#)

PC **PyCharm**

The Python IDE

PyCharm
(instalujemy obligatoryjnie)

Full-fledged Professional or [Free Community](#)



O czym będziemy wspominali?

Version 1.74 is now available! Read about the new features and fixes from November.

Code editing. Redefined.

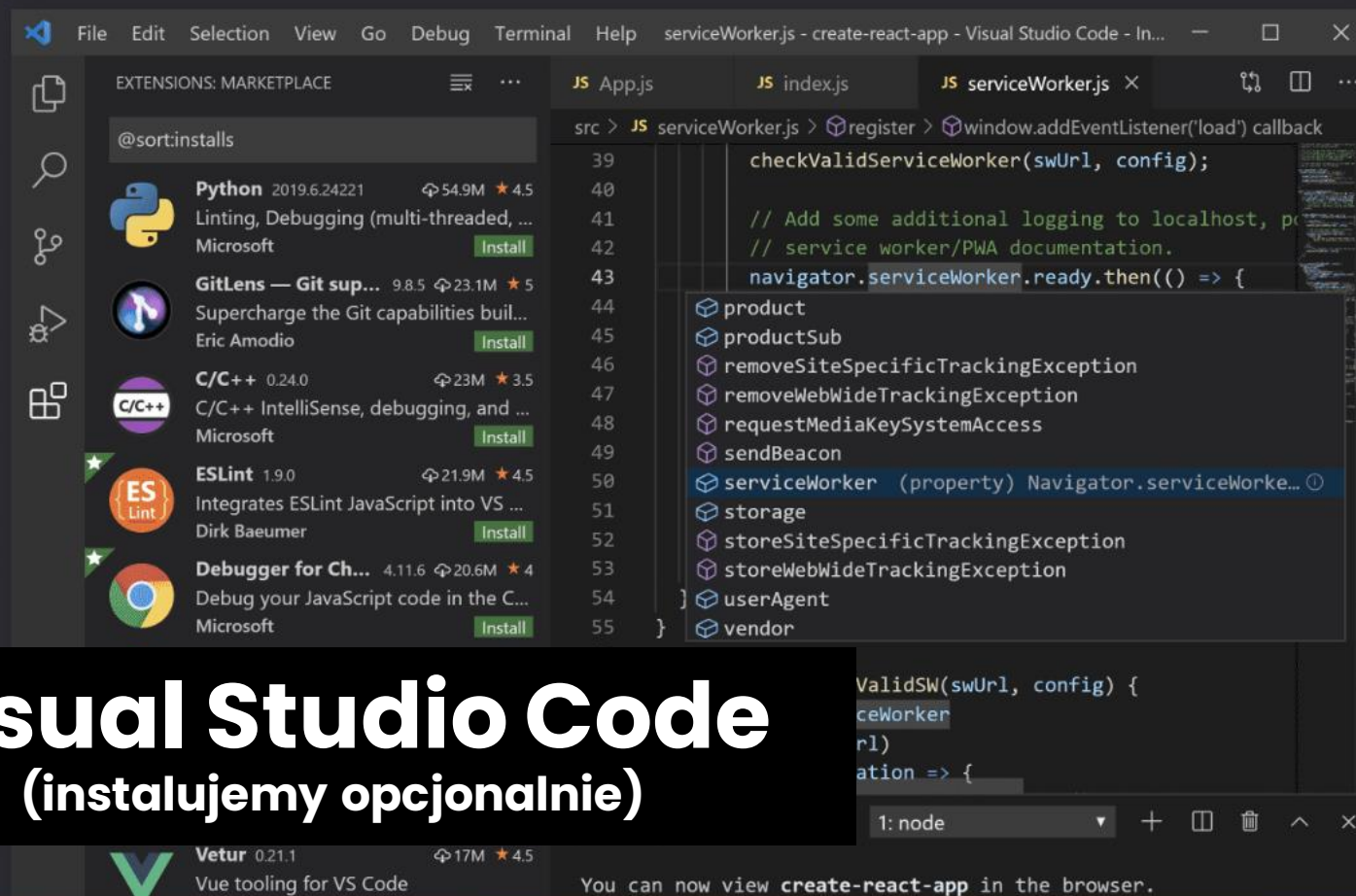
Free. Built on open source. Runs everywhere.

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Stable Build

Web, Insiders edition, or other platforms

By using VS Code, you agree to its
license and privacy statement.

Visual Studio Code (instalujemy opcjonalnie)



You can now view create-react-app in the browser.



Python

Microsoft  |  74,373,167 installs |      (525) | Free

IntelliSense (Pylance), Linting, Debugging (multi-threaded, remote), Jupyter Notebooks, code formatting, refactoring, unit tests, and more.

[Install](#)[Trouble Installing?](#)[Overview](#)[Version History](#)[Q & A](#)[Rating & Review](#)

Python extension for Visual Studio Code

A [Visual Studio Code extension](#) with rich support for the [Python language](#) (for all [actively supported versions](#) of the language: ≥ 3.7), including features such as formatting, refactoring, variable explorer,

Support for [vscode.dev](#)

Categories

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(instalujemy opcjonalnie)

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The entire **Pro Git book** written by Scott Chacon and Ben Straub is available to [read online for free](#). Dead tree versions are available on [Amazon.com](#).

Download for Windows

[Click here to download](#) the latest (**2.39.0**) **64-bit** version of **Git for Windows**. This is the most recent [maintained build](#). It was released **25 days ago**, on 2022-12-21.

Other Git for Windows downloads

Standalone Installer

[32-bit Git for Windows Setup.](#)

[64-bit Git for Windows Setup.](#)

Portable ("thumbdrive edition")

[32-bit Git for Windows Portable.](#)

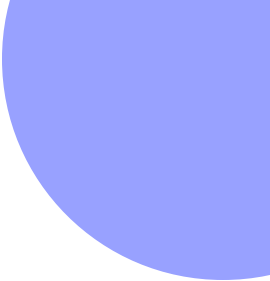
[64-bit Git for Windows Portable.](#)

Using winget tool

Install [winget tool](#) if you don't already have it, then type this command in command prompt or

GIT
(instalujemy opcjonalnie)

n, you can build it from [the](#)



Wstęp





```
110011100111000001111100000001000011111000011111100000000010000011001111100001
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111001001110000011111000001100011000001001111110000011100110011111000000000111
000001110000111100001100
```

Język maszynowy



```
org 0x100

mov dx, msg
mov ah, 9
int 0x21

mov ah, 0x4c
int 0x21

msg db 'Hello, World!', 0x0d, 0x0a, '$'
```



Assembler dla 64-bitowych procesorów Intela

(we współpracy z Johnem von Neumannem, 1947)



```
#include <stdio.h>

int main() {
    printf("Hello, World!");
    return 0;
}
```



Język C

(Dennis Richie, lata 70)



```
print("Hello, world!")
```



Python

(Guido van Rossum, 1991)

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1 2 3 4 5

Python is a programming language that lets you work quickly and integrate systems more effectively. [>>> Learn More](#)

Get Started

Whether you're new to programming or an experienced developer, it's easy to learn and use Python.

[Start with our Beginner's Guide](#)

Download

Python source code and installers are available for download for all versions!

Latest: Python 3.11.1

Docs

Documentation for Python's standard library, along with tutorials and guides, are available online.

docs.python.org

Jobs

Looking for work or have a Python related position that you're trying to hire for? Our **relaunched community-run job board** is the place to go.

jobs.python.org

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Dokumentacja

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Docs by version

Python 3.12 (in development)
Python 3.11 (stable)
Python 3.10 (stable)
Python 3.9 (security-fixes)
Python 3.8 (security-fixes)
Python 3.7 (security-fixes)
Python 3.6 (EOL)
Python 3.5 (EOL)
Python 2.7 (EOL)
All versions

Other resources

PEP Index
Beginner's Guide
Book List
Audio/Visual Talks
Python Developer's Guide

Python 3.11.1 documentation

Welcome! This is the official documentation for Python 3.11.1.

Parts of the documentation:

[What's new in Python 3.11?](#)

or all "What's new" documents since 2.0

[Tutorial](#)

start here

[Library Reference](#)

keep this under your pillow

[Language Reference](#)

describes syntax and language elements

[Python Setup and Usage](#)

how to use Python on different platforms

[Python HOWTOs](#)

in-depth documents on specific topics

[Installing Python Modules](#)

installing from the Python Package Index & other sources

[Distributing Python Modules](#)

publishing modules for installation by others

[Extending and Embedding](#)

tutorial for C/C++ programmers

[Python/C API](#)

reference for C/C++ programmers

[FAQs](#)

frequently asked questions (with answers!)

Indices and tables:

[Global Module Index](#)

quick access to all modules

[General Index](#)

all functions, classes, terms

[Glossary](#)

the most important terms explained

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lists all sections and subsections

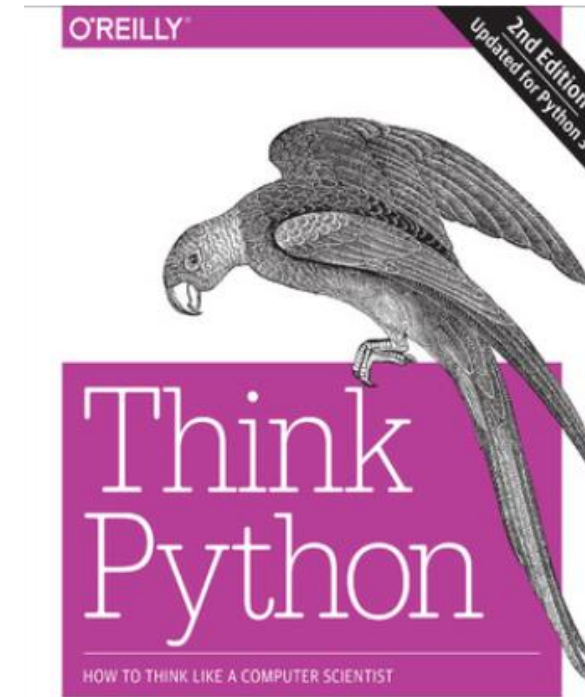
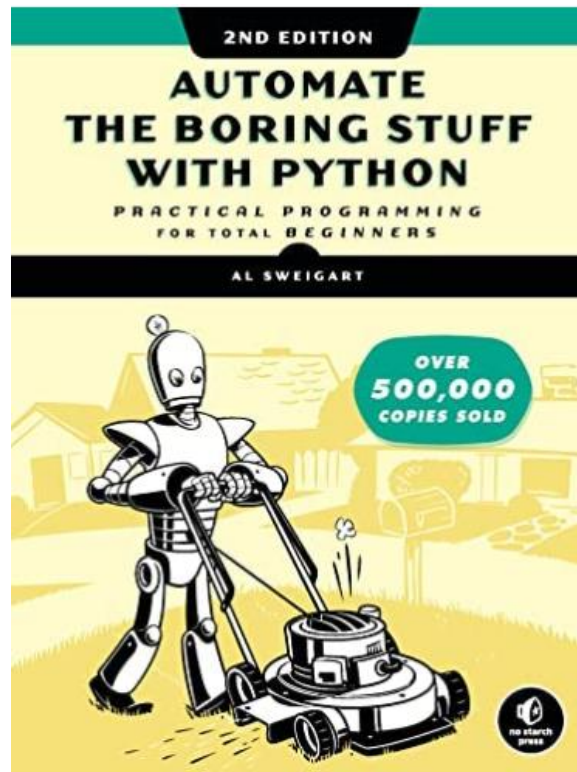
Meta information:

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Książki



Allen B. Downey

Tutoriale

Real Python Tutorials



Python Folium: Create Web Maps From Your Data

You'll learn how to create web maps from data using folium. The package combines Python's data wrangling strengths with the data visualization power of the JavaScript library Leaflet. In this tutorial, you'll create and style a choropleth world map that shows the ecological footprint per country.

Jan 11, 2023 data-science intermediate python

— FREE Email Series —

Python Tricks

```
1# How to merge two dicts
2# in Python 3.5+
3
4>>> x = {'a': 1, 'b': 2}
5>>> y = {'b': 3, 'c': 4}
6
7>>> z = {**x, **y}
8
9>>> z
10{'c': 4, 'a': 1, 'b': 3}
```

Email...

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 - web-scraping

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Kursy

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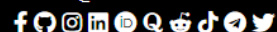
CS50's Introduction to Programming with Python

OpenCourseWare

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David J. Malan

malan@harvard.edu



0. Functions, Variables

1. Conditionals

2. Loops

3. Exceptions

4. Libraries

5. Unit Tests

6. File I/O

7. Regular Expressions

8. Object-Oriented Programming

9. Et Cetera

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Quick Start Guide

Welcome

An introduction to programming using a language called Python. Learn how to read and write code as well as how to test and “debug” it. Designed for students with or without prior programming experience who’d like to learn Python specifically. Learn about functions, arguments, and return values (oh my!); variables and types; conditionals and Boolean expressions; and loops. Learn how to handle exceptions, find and fix bugs, and write unit tests; use third-party libraries; validate and extract data with regular expressions; model real-world entities with classes, objects, methods, and properties; and read and write files. Hands-on opportunities for lots of practice. Exercises inspired by real-world programming problems. No software required except for a web browser, or you can write code on your own PC or Mac.

Whereas [CS50x](#) itself focuses on computer science more generally as well as programming with C, Python, SQL, and JavaScript, this course, aka CS50P, is entirely focused on programming with Python. You can take CS50P before CS50x, during CS50x, or after CS50x. But for an introduction to computer science itself, you should still take CS50x!

► [Watch an introduction](#)

How to Take this Course

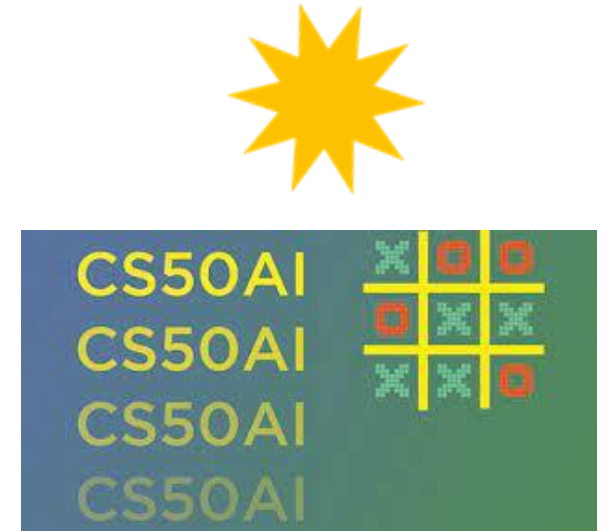
Even if you are not a student at Harvard, you are welcome to “take” this course for free via this OpenCourseWare by working your way through the course’s ten [weeks](#) of material. If you’d like to submit the course’s [problem sets](#) and [final project](#) for feedback, be sure to [create an edX account](#), if you haven’t already. Ask questions along the way via any of the course’s [communities](#)!

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- If interested in a [professional certificate](#) from [edX](#), enroll at [cs50.edx.org/programs/python](#) (for Python) or [cs50.edx.org/programs/data](#) (for Data Science) instead.

How to Teach this Course

If you are a teacher, you are welcome to adopt or adapt these materials for your own course, per the [license](#).





This is CS50.



Dziękujemy!

