goskills

Introduction to Python

GoSkills online course syllabus

Skill level
Beginner

Lessons
41

Accredited by
CPD

Pre-requisites
No prior experience needed

Video duration
3h 1m

Estimated study time
5h 5m

Instructor
John Elder

Intro and Setup

1 ### Install Sublime and Git Bash Terminal
We'll start off by installing the Sublime Text editor and the Git Bash Terminal.

2 ### Installing Python
We'll download and install Python.

3 ### First Program
Let's create our first program.

4 ### Comments and C9 Transition
Learn when and how to use comments in your code.

Python Basics

5 ### Variables
What is a variable and how can you name them?

6 ### Data Types
We'll look at data types including numbers, strings, lists, tuples, and dictionaries.

7 ### Strings
What is a string?

8 String Manipulation

How to manipulate strings.

9 Math Operators

How to do basic math in Python.

10 Numbers

What's the difference between a floating point number and an integer?

11 Assignment Operators

What are the different assignment operators and how are they used.

12 Lists

What are lists and how do we use them?

13 Lists of Lists

We'll look at multidimensional lists, or - lists of lists.

14 Tuples

What is a tuple and how is it different from a list?

15 Dictionaries

What is a dictionary and how do we use them?

Intermediate Python

16 Data Type Conversion

How to convert one data type into another data type.

17 Comparison Operators

How to compare two things.

18 Conditionals If/Else/Elif

Using comparison operators to make decisions.

19 Multiple Conditionals

What are the logical operators AND/OR/NOT and how do we use them?

20 Python Formatting

Formatting in Python is important! Let's look at lines and indentation, and single line If statements.

21 Membership Operators

We'll look at the membership operators "In", and "Not In".

22 Identity Operators

We'll look at the identity operators "Is", and "Is Not".

23 While Loops

Learn to loop using a While loop.

24 For Loops

Learn to loop using a For loop.

25 Loop Control Statements

Take control of your loops using "break", "continue", and "pass".

26 FizzBuzz!

Let's build a FizzBuzz app!

27 Functions Part 1

What are functions and how to use them.

28 Functions Part 2

More about functions and how to use them.

29 Program Flow

Understanding Program Flow in Python, and how functions can change that flow.

30 Random Numbers

How to create and use random numbers.

31 Modules

Using third party modules in your code, and creating your own.

32 Getting User Input

Allow the user to interact with your program with raw_input and input.

33 Opening and Closing Files

How to open and close a file with Python.

34 Reading and Writing Files

How to read and write to a file with Python.

35 Renaming and Deleting Files

How to rename and delete a file with Python.

Advanced Python

36 Overview of Classes and Object Oriented Programming

What are classes and what are they used for.

37 Creating a Class Part 1

How to create a simple class.

38 Creating a Class Part 2

More about creating simple classes.

39 Creating A Class Part 3

Finishing up our tutorial on classes.

40 Built-In Class Attributes

What are the built-in Python class attributes?

41 Class Inheritance

Using other classes inside of your class.

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