WOMEN WHO CODE /python

Python for Beginners

Weekly Study Group for Python Beginners
Starting October 22nd | 12PM ET

Register at womenwhocode.com/events

WELCOME!

We will get started shortly.

Please share in the Chat:

- Where you are joining from
- What the weather is like today

Reminder: Set your Chat to "Everyone".

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Our Mission

Empower diverse women to excel in technology careers

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Our Vision

A tech industry where diverse women and historically excluded people thrive at every level.

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CODE OF CONDUCT

WWCode is an inclusive community, dedicated to providing an empowering experience for everyone who participates in or supports our community, regardless of gender, gender identity and expression, sexual orientation, ability, physical appearance, body size, race, ethnicity, age, religion, socioeconomic status, caste, creed, political affiliation, or preferred programming language(s).

Our events are intended to inspire women to excel in technology careers, and anyone who is there for this purpose is welcome. We do not tolerate harassment of members in any form. Our **Code of Conduct** applies to all WWCode events and online communities.

Read the full version and access our incident report form at
womenwhocode.com/codeofconduct

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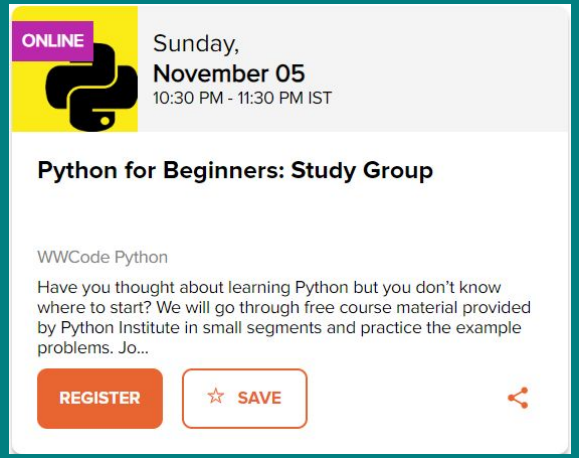
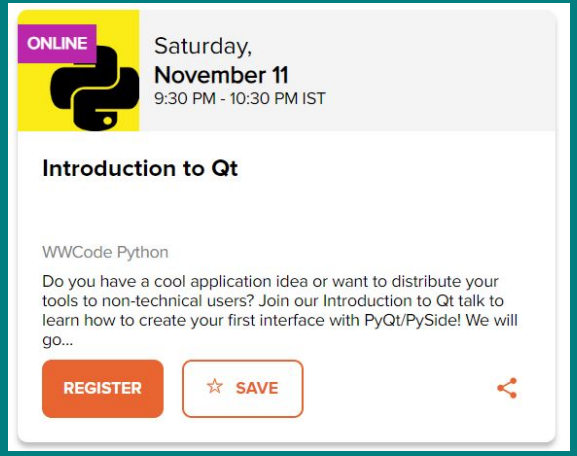
/upcoming events

Learn more and register at
womenwhocode.com/python





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/stay connected

Join Women Who Code Python on Slack

Find us on LinkedIn, Twitter, Instagram & Facebook: **@WWCodePython**

Find links to join our community and follow us: **beacons.ai/WWCodePython**

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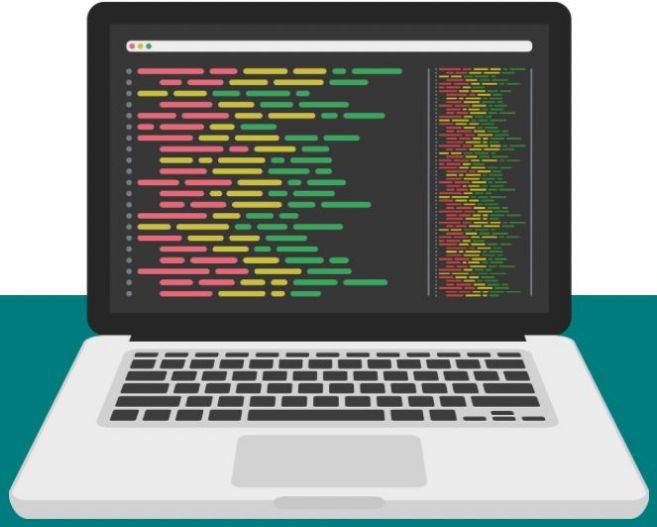

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MEET THE TEAM

Lisa Adams
General Volunteer
WWCode Python

Dilek
General Volunteer
WWCode Python

Amma
General Volunteer
WWCode Python

Soumya
Leadership Fellow
WWCode Python

Shrishti
Track Lead
WWCode Python

Our Speaker

Lisa Adams, General Volunteer

Lisa has a B.S. in Electrical Engineering Tech. and has been employed as a Hardware Technical Writer in the satellite communications industry for more than 25 years.

In her free time, she volunteers with a variety of tech organizations and likes to learn all about software, especially Python and APIs! She is also a Women Who Code DFW Evangelist.

[PCEP-30-02]
PCEP – Certified Entry-Level Python...
Python Institute

COLLIN COLLEGE

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Review Previous Week

- Fundamentals of Computer Programming
- Difference between compilation & interpretation
- Basic information about Python
- Different types of interfaces

Review Previous Week

Language Concepts

- A language is a means for expressing and recording thoughts.
- A natural language is the normal way humans communicate.
- A programming language is a language developed by humans and used to communicate with computers.
- A high-level programming language allows the programmer to write regardless of computer hardware type. Python, JavaScript, C are all examples.
- Machine language is the lowest level - sequence of binary digits 0 & 1

Review Previous Week

- Instruction List (IL) is a list of all elementary operations that can be executed by a certain CPU.
- Source Code is text encoded in any of the programming languages. The source code is put inside a text file which resides on the Developers computer. Python source code files end with .py.

Review Previous Week

- Any language has an alphabet - set of symbols used to build words.
- Lexis - Dictionary - A set of words the language offers.
- Syntax - A set of rules used to determine if a sequence of words forms a valid sentence.
- Semantics - A set of rules used to determine if the sentence make sense.

Review Previous Week

Difference between Compilation & Interpretation

Source code cannot be directly executed by a computer. It must be translated into machine code: Compiled or Interpreted

Review Previous Week

Compiler/Translator

- Compilation is performed by a one-time translation of the source program; an executable binary file is created.
- The file can be run at any time without the need to have the source code; the program that performs the above translation is called a compiler or translator.

Review Previous Week

Interpreter

- An Interpreter is a dedicated program designed to translate the source program on-the-fiy each time it has to be run; the program performing this task is called an Interpreter
- This means that the interpreter is needed whenever the source code has to be executed.

Review Previous Week

- Programming language are designed to be either Compiled or Interpreted.
- Python is an interpreted programming language, while C++ is a compiled one.

Review Previous Week

Special Tricky Note:

- Python itself is actually written mostly in the C programming language.
- It allows Python to be easily ported and migrated to all platforms providing the ability to compile and run C language programs.
- This is also why the main implementation is often referred to as CPython.

Review Previous Week

Interpretation Advantages (Python Example)

- You can run the code as soon as you complete it - No additional phases of translation.
- The code can run on all computers. No need to compile it for different hardware types.

Review Previous Week

Interpretation Disadvantages (Python Example)

- Not as fast
- Both the Developer and User will need to have the interpreter installed to run the code.

Review Previous Week

Compilation Advantages (C++ Example)

- Faster
- Only the programmer has to have the compiler. The user can use the code without it.
- The translated code is stored using machine language, so your code is private.

Review Previous Week

Compilation Disadvantages (C++ Example)

- The compilation itself may be a very time consuming.
- You have to have compilers for different hardware platforms.

Python Quiz for Previous Week

- Who invented Python?
- What is IDLE?
- What is an example of a Python file extension?
- How did Python, the programming language, get its name?
- What do you call a tool that lets you launch your code step-by-step and inspect it at each moment of execution?
- What is CPython?

Python Quiz for Previous Week

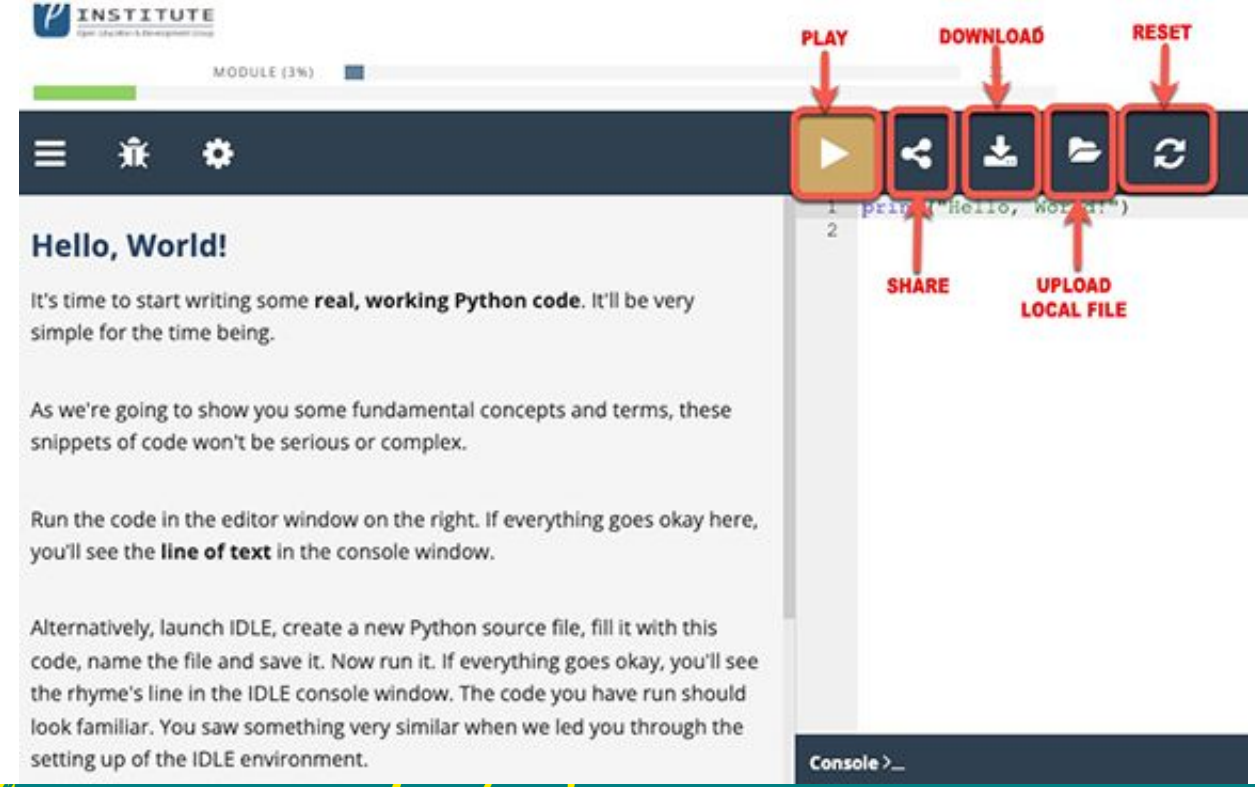
- What Python version is covered in this course?
- What do you call a computer program which directly executes instructions written in a programming language?
- What is a source code?
- Python is an example of ...

Assignment

Complete the following small bites of Module 2:

- print ( ) Function
- Python Literals

Assignment


INSTITUTE
MODULE (3%)
PLAY
DOWNLOAD
RESET
SHARE
UPLOAD
LOCAL FILE
Hello, World!
It's time to start writing some real, working Python code. It'll be very simple for the time being.
As we're going to show you some fundamental concepts and terms, these snippets of code won't be serious or complex.
Run the code in the editor window on the right. If everything goes okay here, you'll see the line of text in the console window.
Alternatively, launch IDLE, create a new Python source file, fill it with this code, name the file and save it. Now run it. If everything goes okay, you'll see the rhyme's line in the IDLE console window. The code you have run should look familiar. You saw something very similar when we led you through the setting up of the IDLE environment.
Console >_

Questions???

Thank You!

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