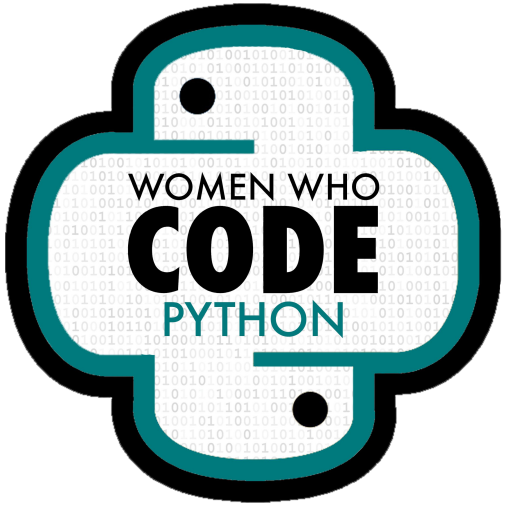
WELCOME

WOMEN WHO CODE

Women Who Code Python

Python Libraries 101



OUR MISSION

Inspiring women to excel in technology careers.

WOMEN WHO CODE

OUR VISION

A world where diverse women are better represented as engineers and leaders in technology.

WOMEN WHO CODE

OUR TARGET

Engineers with two or more years of experience looking for support and resources to strengthen their influence and levelup in their careers.

WOMEN WHO CODE

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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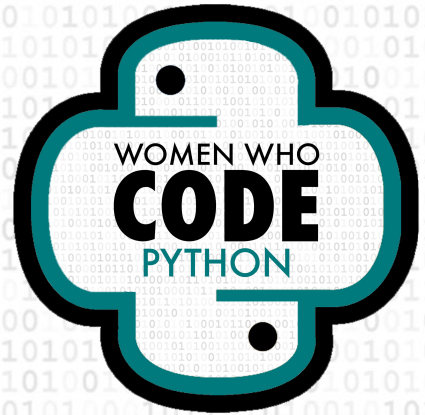
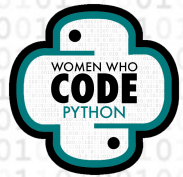


Python Libraries 101:

Python Standard Library

Session # 2



Soumya Vemuri
CSE Student

Shermaine Ang
Incoming EIE Freshman at Imperial College London

Karen Wong
Programmer at R&D Company

Meet Your Team!

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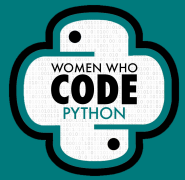
SHERMAINE

Incoming EIE Freshman
WWCode Python Volunteer
https://www.linkedin.com/in/shermaine-ang-1348a21ab/

Today's Agenda

1. Recap: What is the Python Standard Library?
2. Modules we'll be exploring today
    a. datetime
    b. time
    c. calendar
3. Setup and Guidelines
4. Hands-on Coding



Python Libraries 101

Welcome to the series!

- The series will cover popular Python libraries used everyday, over a range of fields.
- Each session will begin with a conceptual presentation followed by code walkthroughs and hands-on implementation.
- Sessions will be held every week at 10 am EDT

Welcome to the series!

- The series will start by exploring popular modules in the Python Standard Library such as
  - file system libraries os and sys,
  - math utilities statistics, math and random and
  - data type libraries collections, datetime and calendar.

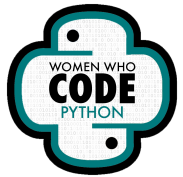
- The python standard library will be followed by learning data visualization libraries matplotlib, seaborn and plotly.

- More libraries such as tkinter, numpy, pandas, OpenCV and more will be discussed further into the series!

Python Standard Library

What is the Python Standard Library?

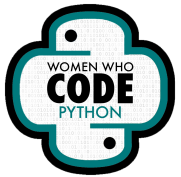
- Python offers a lot of built-in functionality through its standard library.
- Built-in modules are written in C and integrated with the Python shell.
- The standard library is a huge collection of utilities, ranging from math utilities to debugging to creating graphical user interfaces. Popularly used modules are os, sys, json, re, random, math urllib, tkinter, datetime



datetime

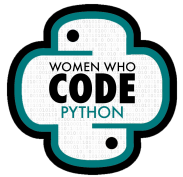
datetime Module

- The datetime module can be imported to work with the **date** as well as **time**.
- It supplies classes to work with date and time. These classes provide a number of functions to deal with dates, times and time intervals.



datetime Module: Functions

- datetime.datetime.now() returns current date and time.
- datetime.date.today() returns today's date
- datetime.date(*year,month,date*) returns YYYY-MM-DD
- datetime.date.fromtimestamp(*timestamp*) returns YYYY-MM-DD from timestamp
- datetime.time(*hour,minute,seconds,microseconds*) returns HH:MM:SS.MS



time

time Module

- The time module provides many ways of representing time in code, such as objects, numbers, and strings.
- It also provides functionality other than representing time, like waiting during code execution and measuring the efficiency of your code

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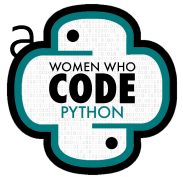
time Module: Functions

- time.time() returns the number of seconds passed since epoch (Epoch is the point where the time starts, and is platform dependent. For Unix, the epoch is January 1, 1970, 00:00:00 (UTC))
- time.ctime(*seconds*) takes seconds passed since epoch as an argument and returns a string representing local time
- time.sleep(*seconds*) delays execution of the current thread for the given number of seconds
- time.strptime(*string[, format]*) parses a string representing a time according to a format.



calendar

calendar Module

- This module allows you to output calendars
- It provides additional useful functions related to the calendar.
- By default, these calendars have Monday as the first day of the week, and Sunday as the last.

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calendar Module: Functions

- calendar.month(yyyy, mm) displays calendar of given month of the year
- calendar.calendar(yyyy) displays calendar of given year
- calendar.HTMLCalendar()
  - This class can be used to generate HTML calendars.

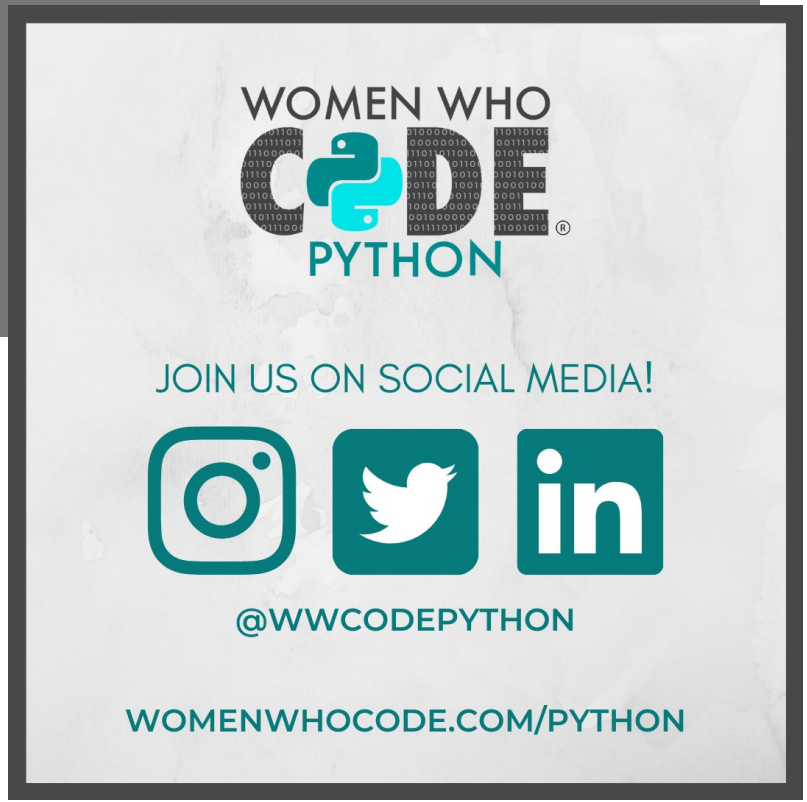
QnA Time!

Let's Code!

Useful Links

- Link to repository
- Python Documentation
  - datetime: https://docs.python.org/3/library/datetime.html
  - time: https://docs.python.org/3/library/time.html
  - calendar: https://docs.python.org/3/library/calendar.html
- Other Resources
  - https://www.geeksforgeeks.org/time-functions-in-python-set-1-time-ctime-sleep/
  - https://www.geeksforgeeks.org/python-datetime-module/
  - https://www.geeksforgeeks.org/calendar/

Stay Connected!



Upcoming Events in the Series:

- ➔ Python Standard Library: collections and itertools
- ➔ Python Standard Library: random, math and statistics

.....and more!

Upcoming Events

SUN 01 AUG	🧍‍♀️ 🧍‍♀️ Meet & Greet Sessions – BuddyMeUp Program Round 4 🧍‍♀️ 🧍‍♀️ *Featured* Online | Python | 11:00 PM – 12:00 AM +08 (UTC+0800)	Register
TUE 03 AUG	✨ Open Source is Better with You in It: Getting Started with Open Source✨ *Featured* Online | Python | 11:30 PM – 12:30 AM +08 (UTC+0800)	Register
SAT 07 AUG	🔊 Python Libraries 101 🔊 *Featured* Online | Python | 10:00 PM – 11:00 PM +08 (UTC+0800)	Register
FRI 13 AUG	🌟 Beginner Python Study Group: If/Else Statements🌟 *Featured* Online | Python | 8:00 AM – 9:00 AM +08 (UTC+0800)	Register

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Thank You for Joining!