PYTHON

STANDARD LIBRARY

WE ARE THE WOMEN WHO CODE

- Women Who Code (WWCode) is global non-profit dedicated to inspiring women to excel in technology careers. We work to support this generation in being and becoming leaders and role models in the tech industry.

- We are the DC Chapter!

- Volunteer / Donate

- Visit our Meetup site

- Python Beginners: 1st Wednesday of the Month;

- Python Hack Night: 3rd Wednesday of the month

PYTHON STANDARD LIBRARY

- Comes with every copy of Python

- Contains hundreds of functions/methods which then grouped together into modules – **Library Reference Documents**

- These modules can be specific to a data type (string, float, boolean) or a operation (math, date/time,)

- **Built-in modules** – data types, common functions, input/output, error exceptions.

- **Import modules** – math, date/time, statistics, random,

- Custom modules - Develop your own

Library Reference Documents

LET'S EXPLORE:

https://docs.python.org/3/library/index.html

What we are going to review:

- What is the library?
- Built-in functions – always available
- Version differences 2.x and 3.x
- Built-in types - boolean and boolean operations used to drive the logic flow in your program
- Built-in Comparisons
- Importing Modules (Math, DateTime examples)
- Code two mini-programs

Mini Program #1

Create mini-program using the module Time
Python 2.x use raw_input
#Python 3.x use input

```python
import time

run = input("Start > ")
seconds = 0

if run == "yes":
    while seconds != 10:
        print(">", seconds)
        time.sleep(1)         #this is the number 1
        seconds += 1
##  print(">", seconds)
print("Script complete.")
```

Using the computer's internal clock for time to print, wait a sec then continue loop again

Mini Program #2

Working with Files and the DateTime module

We will be using print(), input(), str(), string object, file object, datetime object.

Capturing errors in a log file with timestamp.

1. Create a working directory: c:/dev/

2. Create a data file called states.txt - Enter at least 5 states.
Store file in this directory. Code and run program.

3. Go back to states.txt file and edit.   In one of the state names put in some numbers.
Enter another state with a space in it. Run program.

What is happening?