Files & Modules

Part 2

More about files

- Importing other file types
  - .txt
  - .csv
  - .xml

Demo

- Using other data types
- Other use-cases

Modules

- A file containing Python definitions and statements
- Some are included as part of the standard library

Examples:

- Random numbers
- Time module
- Math module
- CSV module
- XML module

Random

- Able to generate random numbers
- Example
- Methods

Example:

```
import random
print(random.randint(0,5))
```

Links: 1, 2

Time

- Retrieve time/date information
  - Date
  - Time
  - Datetime
  - Timedelta - difference
- Example

```
import datetime
print(datetime.datetime.now())
```

Links: 1, 2, 3,

Demo

- Random
- Time

In-class assignment 7

Files:

- Create a Python program that creates a file and adds a given user input to the end of the file.

Modules:

- Create a Python program that rolls a 6 sided die and prints the output
- Create a Python program that prints out the next Friday's date from today
    - E.g. today is March 11, Friday is March 13 or Friday is 03/13/2020

Assignment 7

1. Write a program that finds all the Friday the 13ths from 2000 to 2020
    a. Use functions, including a main function
    b. Save the results in a list and print the list

2. Write a program that creates a file called “cards.txt”
    a. Create an algorithm that will save a random set of playing cards into a file.
    b. Playing cards include 4 suits: hearts, diamonds, spades and clubs and each have 13 cards
    c. Cards should include 2-10, plus aces, jacks, queens and kings (info about playing cards)