CptS 355- Programming Language Design

Python

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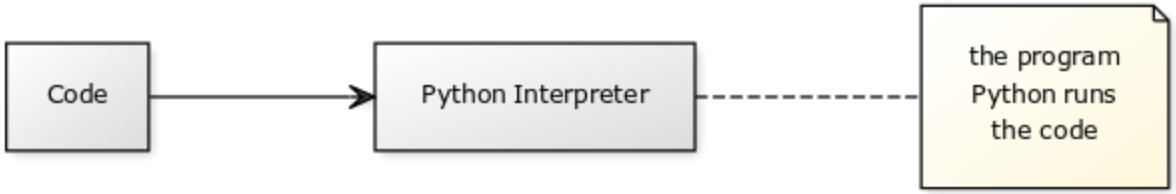
WASHINGTON STATE UNIVERSITY
World Class. Face to Face.

Python Intro

- To run Python programs, you will need the Python interpreter:



- A program can be one or more Python files. Code files can include other files or modules.

Python

TO-DO:

- Download and install Python
  - https://www.python.org/downloads/
  - Install Python3 (not Python 2.7) -- latest Python 3 version is Python3.8.2
- Python comes with the IDLE
  - IDLE is Python's Integrated Development and Learning Environment.
- Also install PyCharm
  - https://www.jetbrains.com/pycharm/download/#section=windows
  - PyCharm is a full featured IDE for Python developed by JetBrains.
- Watch the Python videos on Blackboard
- Start the Python tutorial
  - https://docs.python.org/3/tutorial/
    - Sections 1 through 6
  - https://pythonbasics.org/

Run Python code

- To run code on the terminal:

```
python myfile.py
```

- To run code using Python IDE
  - Will show in class.

- To interpret Python code at the REPL:
  - Type and run Python code.

To quit the REPL:

```
quit()
```

- To import a file (module) at the REPL:

```
from mainfile import *
```

Python Intro

- Python 2 vs Pyhton 3
- Python is an interactive, interpreted, objected oriented language.
  - It is often compared to languages like Ruby, and Perl, as a scripting language.
  - Python code can be evaluated in REPL environment.
- Python has “dynamic strong typing”.
- **Introspection in Python:** the ability of a program to ask questions about itself

- No lecture notes on Python basics.
- Please watch the Python part-1 and part2 videos on Canvas.