

PYTHON BASICS

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What is Python?



Python

- Python is an *interpreted* language
 - You don't have to compile it like Java
- Supports 2 different versions
 - Version 2.7.x
 - Version 3.x
- The two versions are very similar, but have a few distinct changes
- We'll use version 3 today

Python

- Is platform independent
- This means you can take it anywhere like Scratch and Java
- You don't need to recompile it

IDLE

- IDLE is an integrated development environment (IDE) specifically for Python
 - This is similar to eclipse for Java or the Scratch tool.
- Lets you write, save, edit, and run your programs
- Has 2 modes
 - Interactive
 - script

IDLE interactive mode

- Provides a Python shell (terminal)
- Accepts and executes python statements
- Gives immediate feedback
- Great tool for trial/error and experimentation

IDLE Script Mode

- Loads and executes programs (scripts)
- The code that makes up your program is written and saved in a source file (.py)
- Python is directed to interpret and run the saved program

Types of Programs

- **Console Applications**
 - Program executes in a terminal (or the Python shell)
 - Can display only text
- **Graphical User Interfaces**
 - Programs are interacted through a window
 - Can display data and provide a

Very Important

- There is one very important difference between Python and Java!
- Java uses { }
- Python uses whitespace (spaces and tabs)
- Be very careful how many spaces and/or tabs you use!

Python Help

- PyDocs
 - Documentation on Python and built in modules
- StackOverflow
 - Q&A programming site