

1. The Difference Between Brackets, Braces, and Parentheses

- () Parentheses
- [] Brackets
- { } Braces

2. Introducing Python

- + No end-of-instruction operators
- + Comments start with a # character
- + Whitespace matters

prompt >>> : where we type in our expressions

Expressions : like $3 + 4$

Values : 3, 4

Operators : +, -, / that combines their **operands** in different ways

- Expressions don't have to involve an operator. A number itself is an expression.

ex 212 is expression & value.

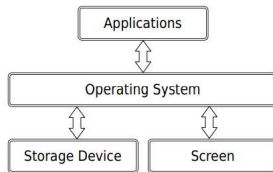
3. Overall Python commands

""" ... """ → Temporarily disable ... code

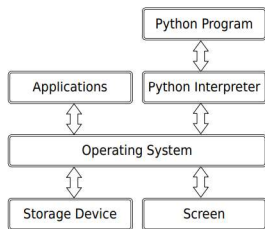
• How does a Computer Run a Python Program?

The computer has **operating system** (Windows, Linux, Mac OS) that is a special program. This is the only program that has access to the hardware.

All other applications send request to the OS



Now, it's common to add a layer between us and the hardware. Writing a program in Python, Java, ... doesn't run directly on top of OS. Instead, another program called **interpreter** (virtual machine) takes program and runs for you.
 ⇒ Safer, easier



There are 2 ways to use Python interpreter.

- 1) One is to tell it to execute a Python program saved in a file with .py
- 2) Another is to interact with it in a program called a **shell**, where you type statements one at a time. Interpreter will execute each statement.



IDLE (Wing101) having a Python shell that communicates with the Python interpreter & also allows you to write and run programs that are saved in a file.