Python Arabic Course | from zero to hero

In this course you will learn:

Geeks Gate.

- Introduction about Python
- Data Types
  - Numbers [integer, float, complex], Strings, Lists, Dictionaries, Tuples, Sets, Booleans.
  - Python ctypes: https://docs.python.org/3/library/ctypes.html
- Python Operators
- Control flow statements
- Methods and Functions
- Type Hints or Annotations (python 3.5^)
- Python OOP

In this course you will learn: (cont.)

Geeks Gate.

- Modules and Packages
- Errors and Exception Handling
- Decorators
- Generators
- Regular Expressions
- Advanced Modules
- Parallel Processing

What is Python?

Geeks Gate.

- Python is an interpreted, high-level and general-purpose programming language.
- Created by Guido van Rossum and first released in 1991.
- Python's design philosophy emphasizes code readability with its notable use of significant whitespace.
- Its language constructs and object-oriented approach aim to help programmers write clear, logical code for small and large-scale projects.

Characteristics of Python:

Geeks Gate.

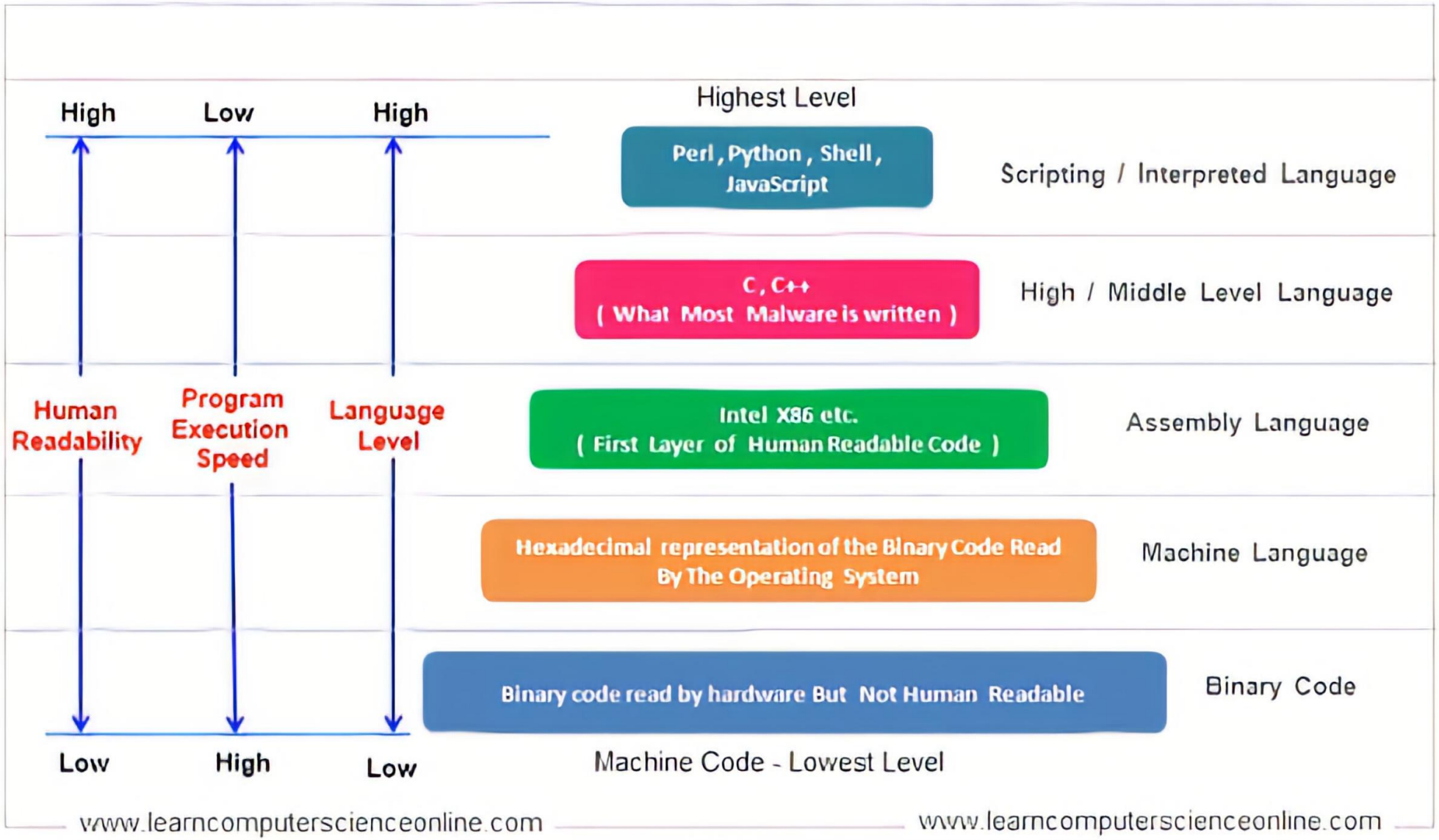
- Easy to learn, read, write and maintain.
- Free and Open-Source. (A big Community for support)
- Vast Libraries Support.
- Portability. (Cross platform)
- Web development (Django, Flask)
- Games (PyGame)
- Desktop Apps (Tkinter, PyQt)
- Mobile Apps (Kivy)
- AI (ML, DL, NLP, CV, DS)
- Web Scrapping / Crawling – Data Wrangling
- CyberSecurity

Characteristics of Python: (cont.)

Geeks Gate.

- It supports functional and structured programming methods as well as OOP.
  - https://medium.com/@LiliOuakninFelsen/functional-vs-object-oriented-vs-procedural-programming-a3d4585557f3
  - https://searchsoftwarequality.techtarget.com/definition/structured-programming-modular-programming
- It provides very high-level dynamic data types and supports dynamic type checking.
- It supports automatic garbage collection. (As most High Level Languages)
- It can be easily integrated with C, C++, COM, ActiveX, CORBA, and Java.

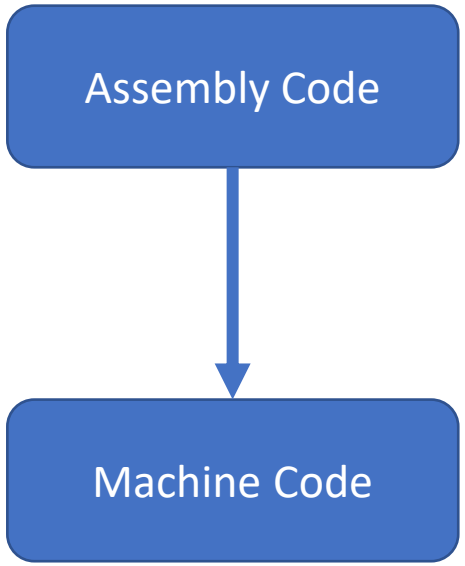
Computer Programming Language - Types And Levels



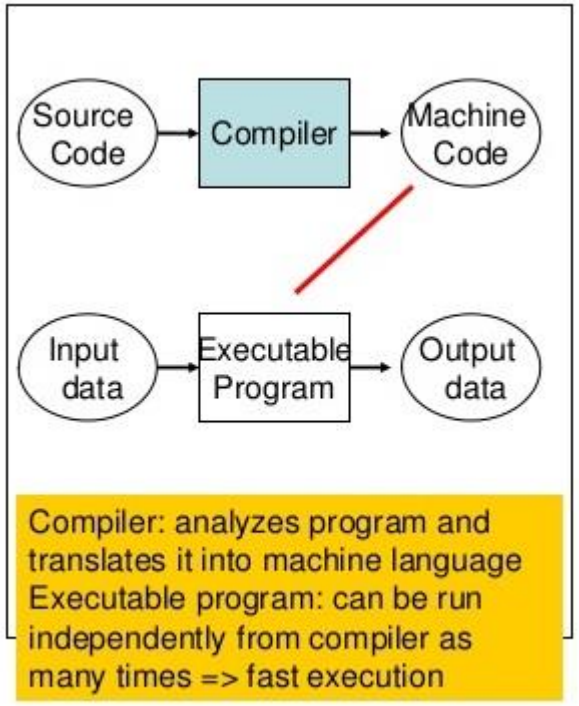
Assembler vs Compiler vs Interpreter

Geeks Gate.

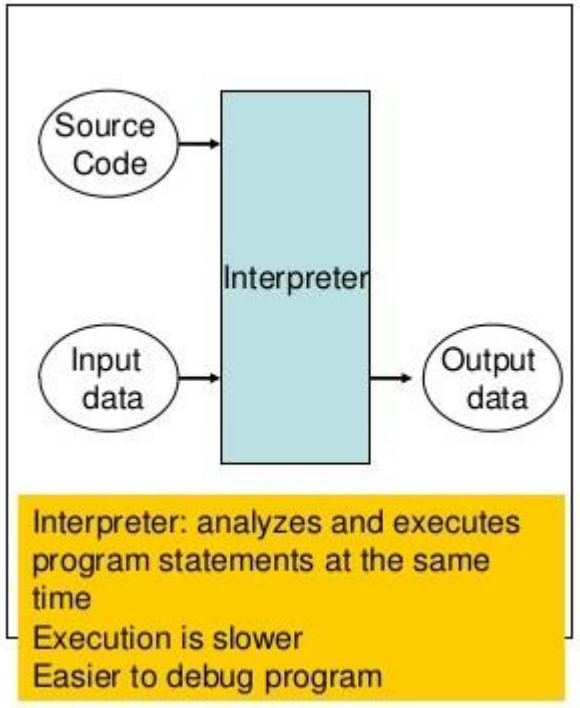
- Assembler:



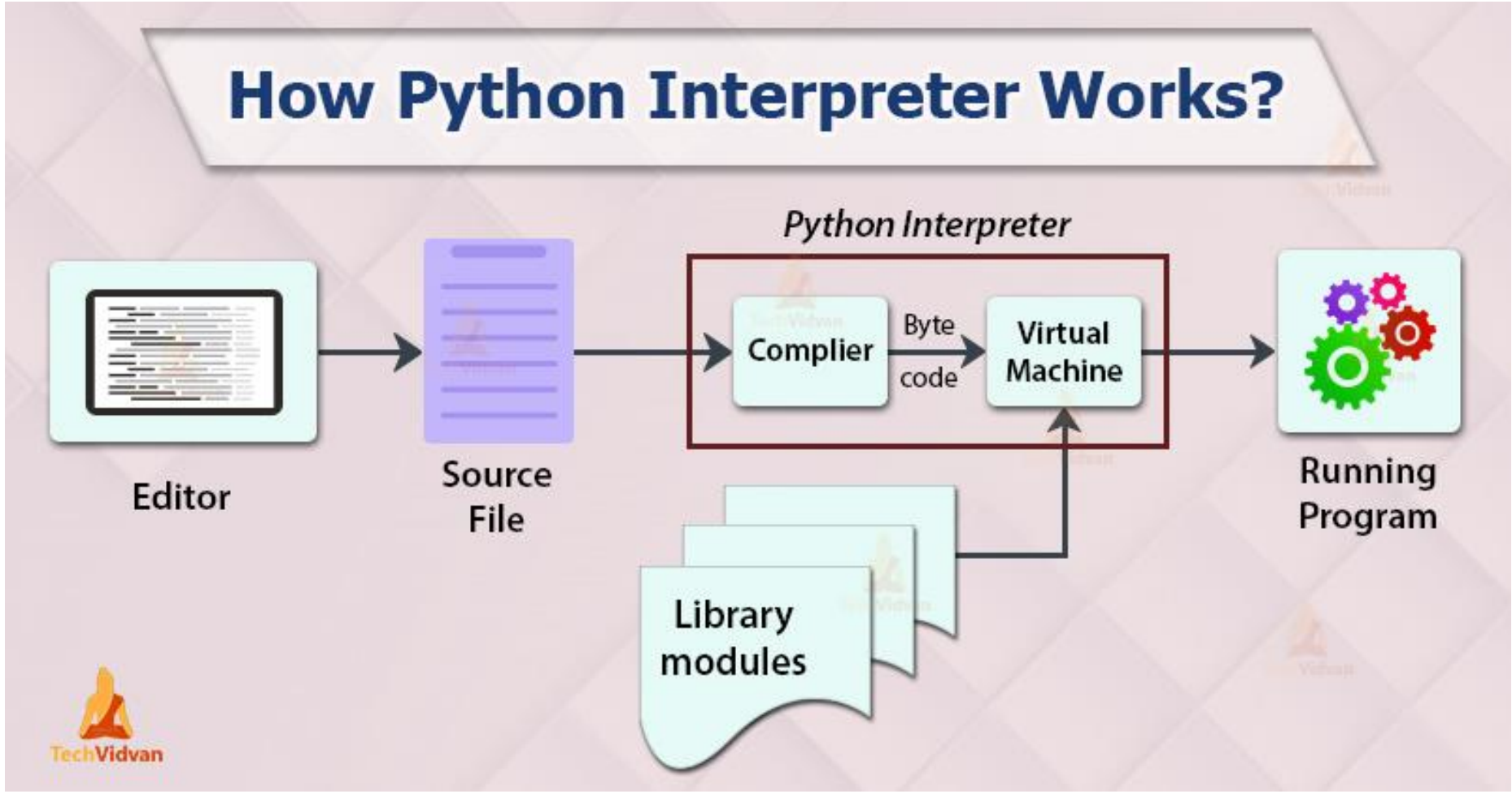
- Compiler:



- Interpreter:



Python Code Lifecycle:



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