

# Programming language(Python)

# Agenda

- What is a programming language
- Installing Python and code editor
- Python basic syntax
- Build simple calculator using Python
- Reading materials

# What is a programming language

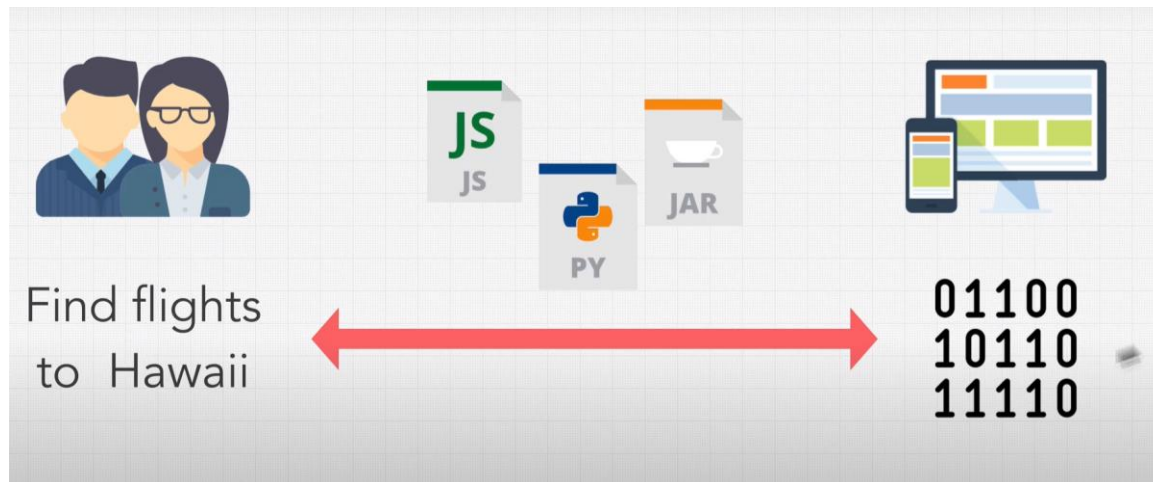
- Programming (also known as coding) is the process of writing instructions to a device, such as a computer or mobile device.
- We write these instructions with a programming language, which is then interpreted by the device
- These sets of instructions may be referred to by various names, but *program*, *computer program*, *application (app)*, and *executable* are a few popular names.
- A *program* can be anything that is written with code; websites, games, and phone apps are programs

# How do programming languages work

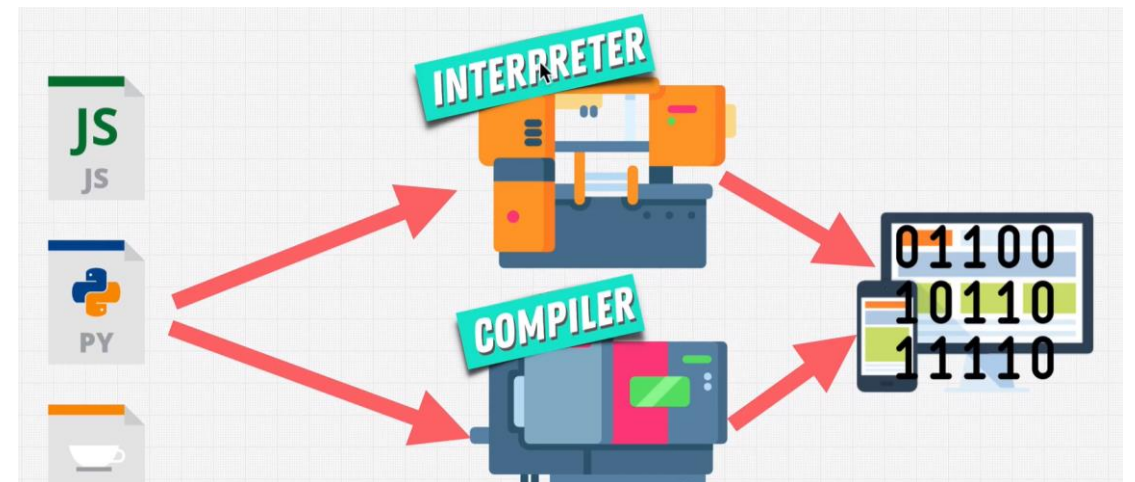
You **write code** to tell it what to do

The code is **compiled**, which turns it into machine code the computer can understand.

The computer **executes** the code



**Interpreter** translates just one statement of the program at a time into machine code. **Compiler** scans the entire program and translates the whole of it into machine code at once



# Python

- Python is a general-purpose interpreted, interactive, object-oriented, and high-level programming language.
- Created by Guido van Rossum, first released it in 1991 as Python
- Python is designed to be highly readable. It uses English keywords frequently where as other languages use punctuation



# 16 Famous Companies that uses PYTHON







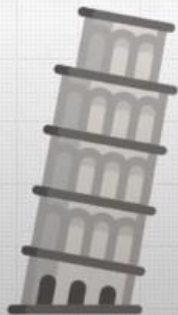
# Applications



# What to master when learning a programming language

## LEARNING A LANGUAGE

Best Practices



Data Types



Actions

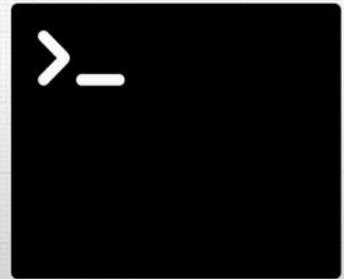


# Download Python

<https://www.python.org/>

# Writing python code

Terminal



Code Editors



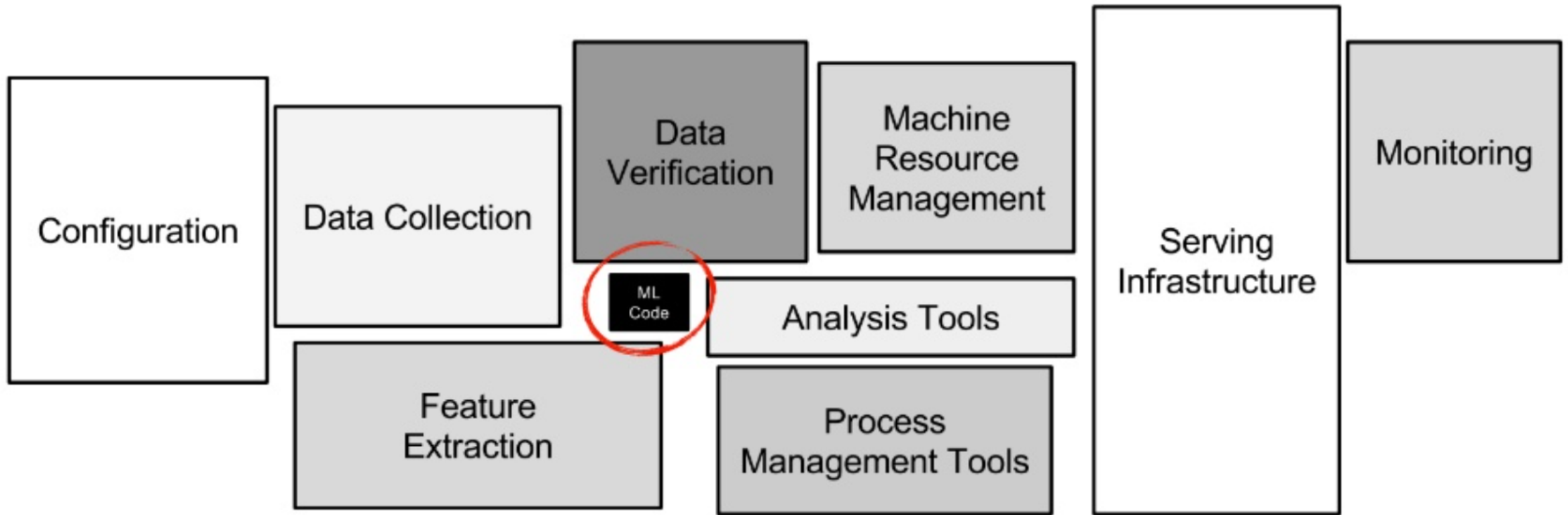
IDEs



Notebooks



ML code portion in a real-world ML system is a lot smaller than the infrastructure needed for its support.



# Read More

Python Basic Syntax :

- 1) <https://zerotomastery.io/cheatsheets/python-cheat-sheet/>
- 2) <https://www.youtube.com/watch?v=kqtD5dpn9C8&t=579s>

More detailed:

- 3) [https://www.youtube.com/watch?v=\\_uQrJ0TkZlc&t=672s](https://www.youtube.com/watch?v=_uQrJ0TkZlc&t=672s)

Python Projects : Building E-commerce Website) :

Short Video Series Project : <https://www.youtube.com/watch?v=Qr4QMBUPxWo&t=3s>

Long Video Series Project [https://www.youtube.com/watch?v=o9TwipumGoU&list=PLYPlvTh05MsxJja9bzQCSTDu4hnEv5N\\_u](https://www.youtube.com/watch?v=o9TwipumGoU&list=PLYPlvTh05MsxJja9bzQCSTDu4hnEv5N_u)