# Python Bootcamp

Week 1

#### **Course Overview**

- 1. No prior programming knowledge required open to everyone
- 2. Introduce new people to programming and Computer Science
- 3. Python language features basics to advance
  - a. Input and Output
  - b. Data Types
  - c. Variables and types
  - d. Loops
  - e. Conditionals
  - f. Object oriented programming and more!
- 4. Step by step instructions
- 5. Content reinforcement exercises and projects
- 6. Certificate for course completion

## Week 1 Objectives

- 1. Setup
  - a. Why program and why Python?
  - b. Setup
    - i. Online environments
    - ii. Editors
    - iii. Python REPL Shell demonstration
  - c. GitHub
- 2. Reading programs
- 3. Basics of Python: Input and Output

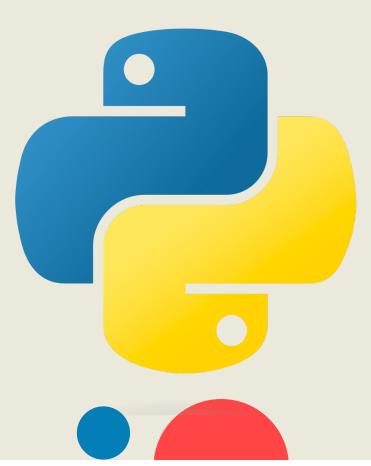
## Why Program?

- 1. Learn a cool tool to build things
- 2. Experiment with ideas
- 3. Wide applications across industries and sectors
- 4. Technological innovations
- 5. High demand skill
- 6. It's fun!



## Why Python?

- 1. Easy, versatile and powerful!
- 2. Super easy to get started
- 3. Large community and support
- 4. Wide adoption across industries
- 5. Loved by programmers and us:)
- 6. Solid language to learn fundamentals



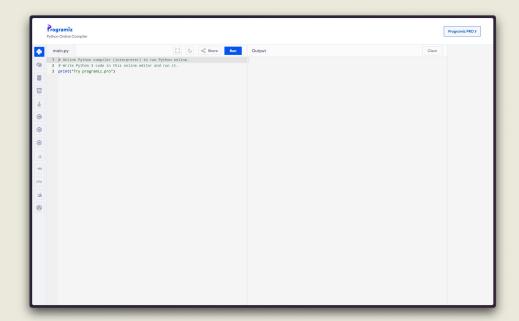
### **IDE: Integrated Development Environment**

- An application to write and compile your program
- Many choices!
- Our recommendation: Visual Studio code
- Second recommendation: Pycharm
- Other choices:
  - Notepad ++
  - o Emacs
  - Vim



#### Code online

- Online Python interpreters no setup needed
- https://www.programiz.com/pyt hon-programming/onlinecompiler/
- 3. No option to save code files
- 4. Missing features and libraries



## **Installing Python**

#### Windows



- https://www.python.org/downloads/
- Install the latest version on the site(3.12)
- Open the command prompt and type "python --version"



#### macOS



- https://www.python.org/downloads/
- Install the latest version on the site (3.12)
- After installation open terminal and type "python3 --version"

## Installing Visual Studio code

- https://code.visualstudio.com/download
- Install Python extension
- Create a new file called helloworld.py
- Save the file in your desired directory
- Press the play button on the top right



## End