Python Bootcamp

Week 2

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

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

Code online

1. Online Python interpreters - no setup needed
2. https://www.programiz.com/python-programming/online-compiler/
3. No option to save code files
4. Missing features and libraries

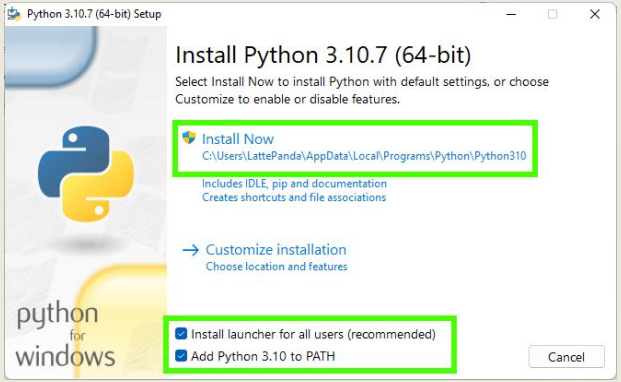
IDE: Integrated Development Environment

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

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 command prompt 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

Reading programs

Input and Output

Exercise

Write a simple program to input your users name and then print it

End