

Introduction to Python Programming

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So...you want to be a programmer



Me in my head



O RLY?

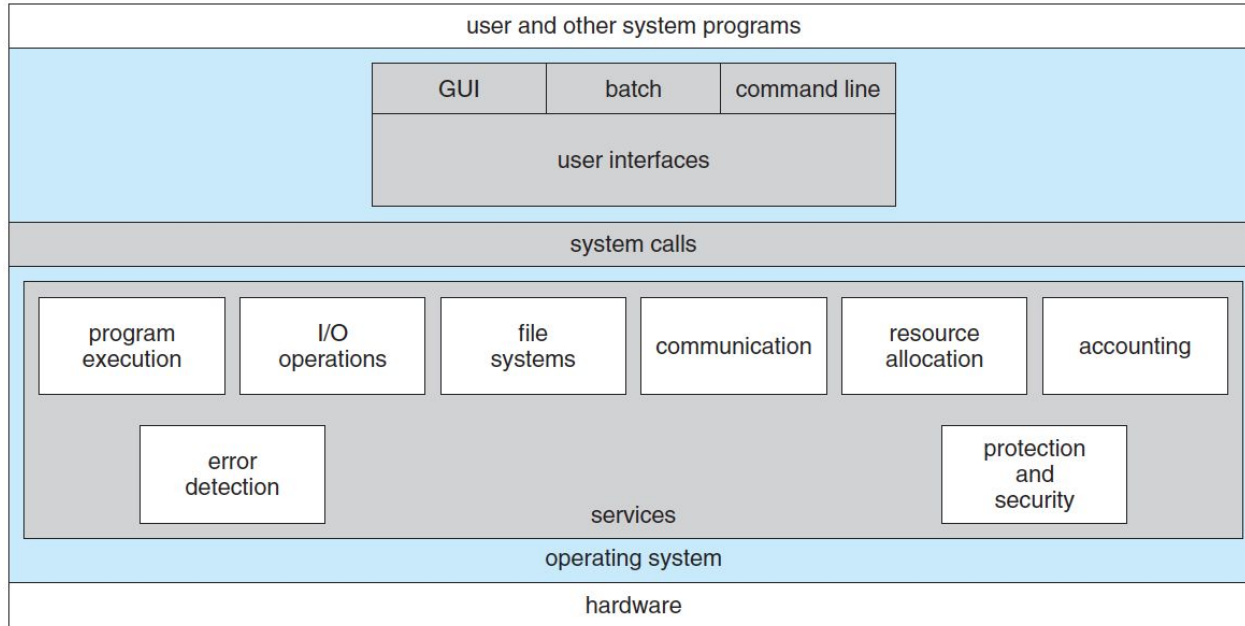
The Practical Developer
@ThePracticalDev

Me in in real life

THERAPY

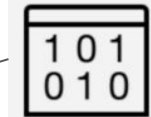
Programmer tells computers what to do.

“Programming is the act of instructing computers to carry out tasks.” It is often referred to as **coding**.



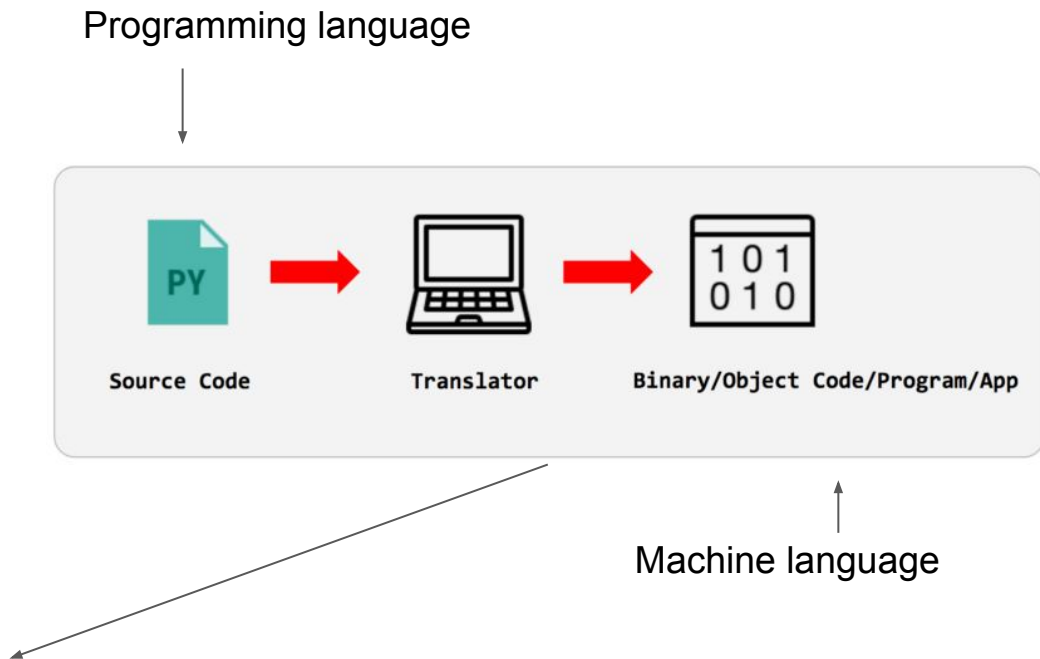
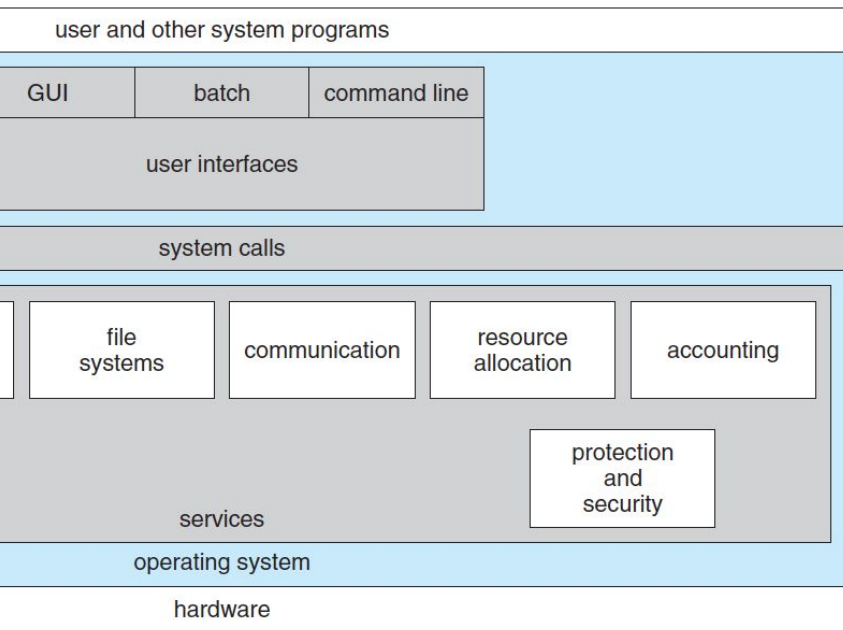
Me before this workshop
Click, click, click

Me **after** this workshop
Typo, typo, typo



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Functional programming vs object oriented programming



- Declarative
 - Emphasis on variables and functions
 - Efficiency and lazy evaluation
- Preemptive/imperative
 - Emphasis on objects and methods (abstraction)
 - Great for designing large programs

Setup

OS: Unix based (Linux/macOS)

Plain text editor: Vi or your favorite text editor (no IDE just yet...)

Python: Ver. 3

Common libraries: Numpy, Pandas, OpenCV etc.

PYPL Popularity of Programming Language

Worldwide, Apr 2021 compared to a year ago:

Rank	Change	Language	Share	Trend
1		Python	29.5 %	-1.0 %
2		Java	17.51 %	-0.6 %
3		JavaScript	8.19 %	+0.2 %
4		C#	7.05 %	-0.2 %
5	↑	C/C++	6.73 %	+1.0 %
6	↓	PHP	6.23 %	+0.0 %
7		R	3.86 %	+0.0 %
8		Objective-C	2.77 %	+0.3 %
9	↑	TypeScript	1.87 %	-0.0 %

Language Index is created by
searched on Google

Source: <https://pypl.github.io/PYPL.html>

Day 1

AN INTRODUCTION TO PYTHON

Let's talk about the anatomy of a Python program, along with Python best practices like naming and commenting.

Today you'll be learning all the foundational basics of Python. How to work with different data types, the Python control structures, best practices, and lastly an exercise in interacting with APIs.

DAY 1 OVERVIEW

By coding along with me in this workshop, you'll:

- You'll learn about the origins of Python, and how it can help you solve complex problems quickly.
- Learn about the different data types Python has to offer, including tips on when and how to use each one.
- Understand the control flow of Python programs - loops, boolean statements, if statements, and return statements.
- Make your code more concise by writing reusable functions.
- Learn to use Python packages from the standard library, as well as how to find and install external libraries.
- Learn how to work with files on your filesystem by reading and writing to them.
- Write programs that interact with APIs by sending requests and receiving responses.

Click to hands-on session: <https://www.learnpython.dev/02-introduction-to-python/>