

```
# parent class
class person():
    def __init__(self, name, gender, age, origin, phone):
        self.name = name
        self.gender = gender
        self.age = age
        self.origin = origin
        self.phone = phone

    def info_func(self):
        print(f'This is {self.name}, {self.age} years old.')

        if self.gender == 'male':
            print(f'He is from {self.origin}, his phone number is {self.phone}.')
        else:
            print(f'She is from {self.origin}, her phone number is {self.phone}.')

# child class
class student(person):
    pass

student1 = student('John', 'male', 21, 'Germany', 55788999)
```



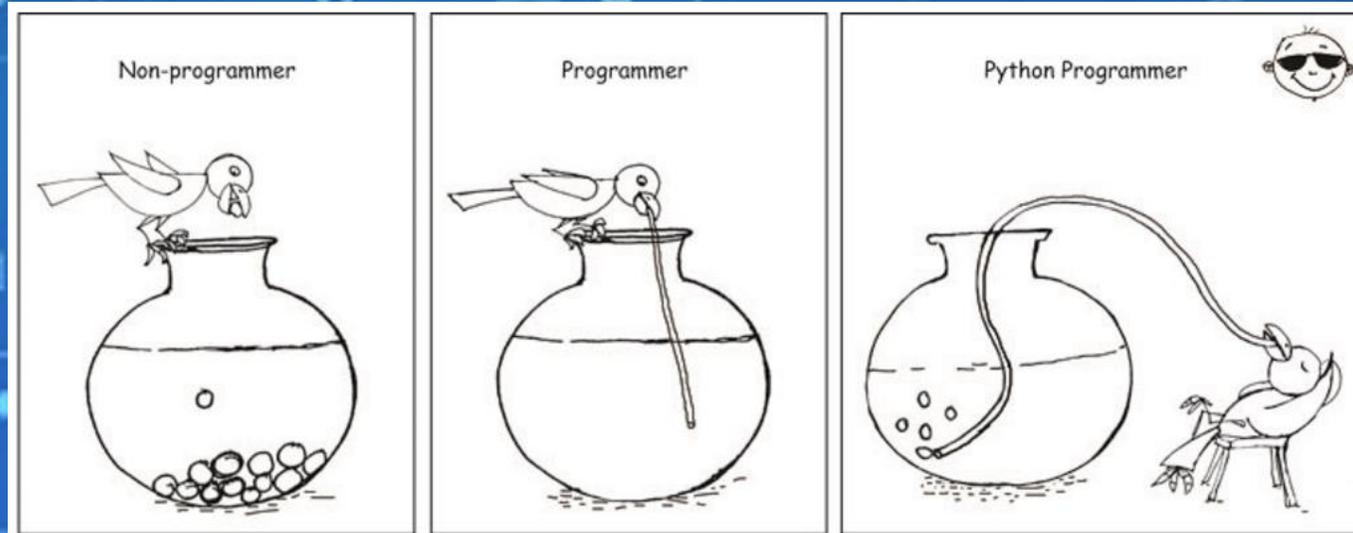
Welcome to the Introduction of this Course:

# Master Python Programming Essentials

the Easy and Fast Way using Daily Life Examples

Instructor: Shouke Wei, Prof. Ph.D.

# Why Python



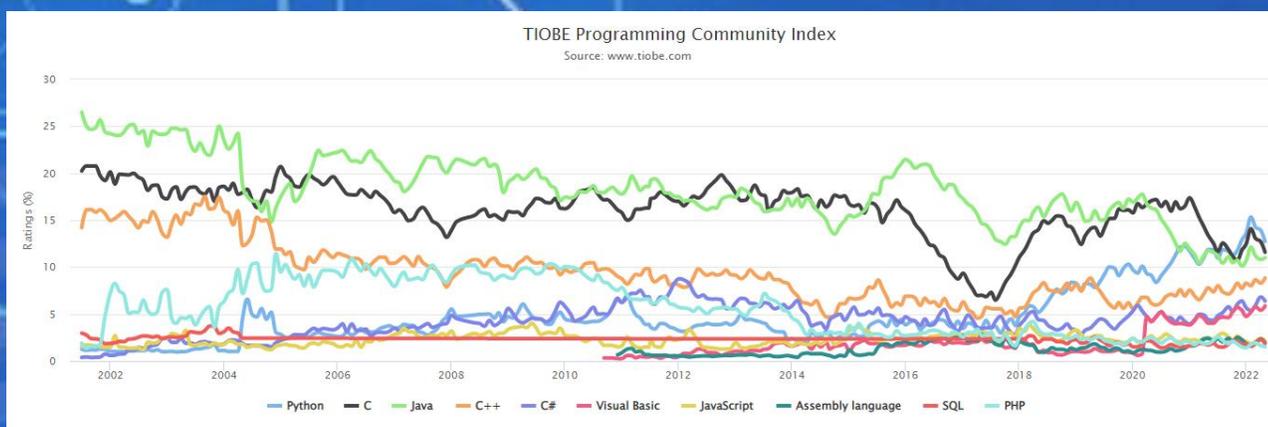
- one of the most popular and easiest programming languages
- ideal language for scientific computing, data analysis and machine learning
- a lot of prebuilt libraries for almost every aspect of computer projects, such as
  - ✓ App Development
  - ✓ Web Development
  - ✓ Data Analysis and Visualization
  - ✓ Machine Learning
  - ✓ Computer Vision and
  - ✓ Much more

## TIOBE Index:

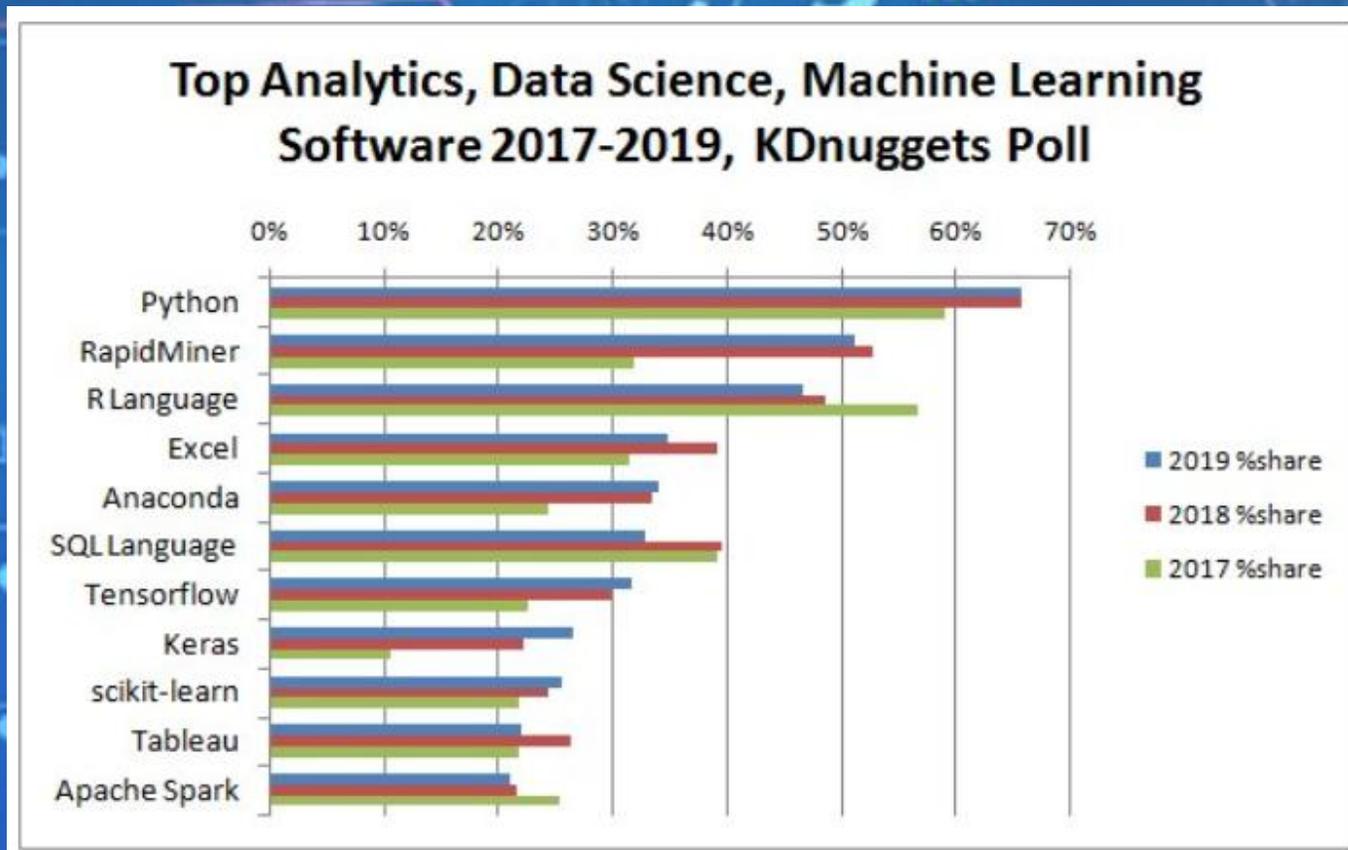
Python has overpassed Java and C and become the most popular programming language of today since October 2021.

Source: <https://www.tiobe.com/tiobe-index/>

May 2022	May 2021	Change	Programming Language	Ratings	Change
1	2	▲	 Python	12.74%	+0.86%
2	1	▼	 C	11.59%	-1.80%
3	3		 Java	10.99%	-0.74%
4	4		 C++	8.83%	+1.01%
5	5		 C#	6.39%	+1.98%
6	6		 Visual Basic	5.86%	+1.85%
7	7		 JavaScript	2.12%	-0.33%
8	8		 Assembly language	1.92%	-0.51%
9	10	▲	 SQL	1.87%	+0.16%
10	9	▼	 PHP	1.52%	-0.34%
11	17	▲	 Delphi/Object Pascal	1.42%	+0.22%
12	18	▲	 Swift	1.23%	+0.08%



## Python leads the top Data Science platforms



source: <https://www.kdnuggets.com>

## Top Programming Languages 2021

Rank	Language	Type	Score
1	Python	🌐 🖥️ ⚙️	100.0
2	Java	🌐 📱 🖥️	95.4
3	C	📱 🖥️ ⚙️	94.7
4	C++	📱 🖥️ ⚙️	92.4
5	JavaScript	🌐	88.1
6	C#	🌐 📱 🖥️ ⚙️	82.4
7	R	🖥️	81.7
8	Go	🌐 🖥️	77.7
9	HTML	🌐	75.4
10	Swift	📱 🖥️	70.4

source: <https://spectrum.ieee.org>

# Contents

## Contents

Section 1: Introduction

Section 2: Setup Python Environment

Section 3: Variable and Basic Data Types

Section 4: Complex Data Types

Section 5: Basic Operators

Section 6: String Formatting Methods

Section 7: Control Flow Statements

Section 8: Built-in Functions

Section 9: Define Functions

Section 10: Create Classes



**Thank you!**

**See you in the next lecture:  
Setup Python Environment**