# **Python Programming Bootcamp**

Learn to code in this beginner Python programming course. This hands-on course is designed to give you a comprehensive understanding of Python programming fundamentals and get you coding on your own. You'll learn how to professionally structure your programs and solve real-world challenges using Object-Oriented Programming.

Group classes in NYC and onsite training is available for this course. For more information, email <a href="mailto:class@programwithus.com">class@programwithus.com</a> or visit: <a href="https://www.programwithus.com/classes/python-programming-immersive">https://www.programwithus.com/classes/python-programming-immersive</a>



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# **Course Outline**

#### Python software environment

- Terminal commands
- · Jupyter Notebook
- Variables
- · Built-in functions in Python
- Data types: strings, integers, floats, lists
- · Definite loops: For loops
- Practical Exercises

#### Logical programming

- · Creating functions in Python
- The behavior of data structures
- · Data types: tuples
- · If, Elif, Else statements
- · Indefinite loops: While loops
- · Indexing and slicing
- Practical Exercises

#### Python built in programming

- Data types: dictionaries
- · Reading from a text file
- Writing to a text file
- · Appending to a text file
- · Analyzing a text file's content
- Practical Exercises

## **Computer science fundamentals**

- Big-O notation
- · Binary search
- Bubble Sort
- Insertion sort
- How to write efficient code
- Practical Exercises

## Application development - Project based assessment

- Review and Q&A
- Intro to Object Oriented Programming
- Working on a project
- · Git and GitHub