

## دوره آموزش پایتون | دوره مقدماتی پایتون

### مروری بر دوره

شما در این دوره با مقدمات مربوط به زبان برنامه نویسی پایتون آشنا خواهید شد.

### آنچه در این دوره خواهید آموخت

آشنایی کلی با زبانهای برنامه نویسی

### سرفصل ها

#### BASICS

- Introduction
- Interpreter vs. Compiler
- Understanding and Getting to Know Python
- Storing Items in Variables
- More on Variables and Strings
- String Formatting
- Displaying Numbers, Variables and Strings

#### PROGRAM FLOW CONTROL

- Conditions with IF ELIF ELSE
- FOR Loops
- Understanding CONTINUE and BREAK
- Augmented Assignments



- WHILE Loops
- Nesting Conditions and Loops
- LISTS, RANGES AND TUPLES

## Lists in Python

- Understanding Iterators
- Using Ranges
- Ordered Sets With Tuples

## DICTIONARIES AND SETS

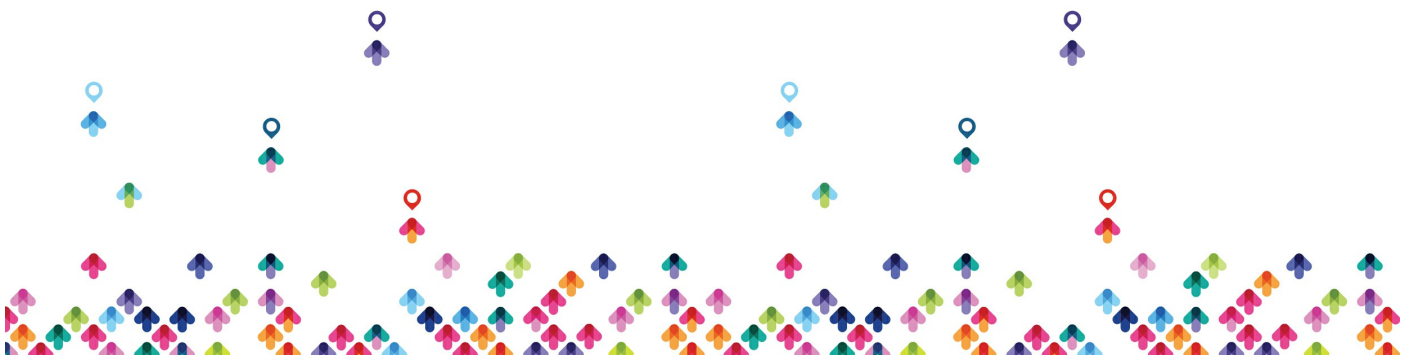
- Binary and Hex Numbers in Python
- Dictionaries and More
- Sets in Python

## INPUTS AND OUTPUTS

- Reading and Writing Text Files
- Appending to Files
- Writing Binary Files Manually
- Using PICKLE to Write Binary Files
- Shelves
- Manipulating Data with Shelves
- Updating With Shelves

## MODULES AND FUNCTIONS

- Modules and Import



- Standard Python Library
- WebBrowser Module
- Time and Date in Python
- Timezones
- Checking Path in Windows/Mac
- Installing the PYTZ Module
- Using Timezones
- Introduction to TKINTER
- TKINTER - Pack Geometry Manager
- TKINTER - Grid Geometry Manager
- Functions in Python
- Scope in Functions
- Global Variables
- Global Keyword
- Importing Techniques
- Underscores in Python
- Namespaces and Recursion
- Recursion with OS Module
- Nonlocal Keyword
- LEGB

## OBJECT ORIENTED PYTHON

- OOP and Classes
- Instances, Constructors, Self and More
- Class Attributes
- Methods



- Non Public and Mangling
- DocString and Raw Literals
- Compile Files and Algorithm Flowchart
- Getters and Properties
- Getters and Setters
- Data Attributes and Properties
- Encapsulation
- Inheritance
- Subclasses and Overloading
- Calling Super Methods
- Overriding Methods
- Polymorphism
- Duck Test
- Composition
- Aggregation
- Delegation

## USING DATABASE

- Database Terminology
- SQLite on Windows, Mac and Linux
- Querying Data
- Order by and Joins
- Wildcards and Views
- SQL Injection Attacks
- Placeholders and Parameter Substitution
- Exceptions



## مخاطبان دوره

• Developer ها

## پیش نیاز ها

• آشنایی کلی با زبانهای برنامه نویسی

## دوره های مرتبط

[دوره برنامه نویسی پایتون | Advanced Python Topics](#)

