



Python Training

simpli|learn

Table of Contents:

- > Program Overview
- > Program Features
- > Delivery Mode
- > Prerequisites
- > Target Audience
- > Key Learning Outcomes
- > Certification Details and Criteria
- > Course Curriculum
- > Course End Project
- > Customer Reviews
- > About Us

Program Overview:

This course covers the fundamentals of Python and how to apply it to real-world applications. The modules, lesson-end projects, and assignments comprising the curriculum cover data operations in Python, strings, conditional statements, error handling, shell scripting, web scraping and the commonly used Python web framework: Django.

Program Features:

- > 36 hours of blended learning
- > 6 hours of Online self-paced learning
- > 30 hours of instructor-led training
- > Five lesson-end knowledge checks and 1 real-life course-end project
- > 20+ assisted practices on all modules
- > Industry-recognized course completion certificate

Delivery Mode:

Blended - Online self-paced learning and live virtual classroom

Prerequisites:

No prior programming knowledge or experience is necessary to take this online Python training course

Target Audience:

- > Software developers
- > Programming enthusiasts
- > Technical leads
- > Architects

Key Learning Outcomes:

By the end of this Python online training course, you will be able to:

- > Understand basic Python concepts
- > Implement file handling and exception handling techniques
- > Understand operators, sets, methods, and dictionaries in-depth
- > Run commands by implementing conditional statements, loops, and functions
- > Perform shell scripting with Python
- > Master Python Django and advanced web development in Python

Certification Details and Criteria:

- > Complete 80% of at least one Live Virtual Class and complete 85% of Online Self-Paced Learning classes.
- > No project criteria but pass the Assessment Test with 70 or marks.

Course Curriculum:

Self Paced Curriculum:

Lesson 01 - Python Basics

- | | |
|---|---|
| > Course Introduction | > Demo: Software Installation and Environment setup |
| > Learning Objectives | > Data Types |
| > Introduction to Python and It's Features | > Input Output Functions |
| > Python Introduction - Uses and Flavours | > Demo: Data Types and Input Output Functions |
| > Python Introduction - Why Python | > Key Takeaways |
| > Software Installation and Environment Setup | |

Lesson 02 - Data Operations

- > Learning Objectives
- > Data Type Conversion
- > Arithmetic Operators
- > Comparison Operators
- > Assignment Operators
- > Bitwise Operators
- > Demo: Data Operations
- > String Methods
- > Demo: String Operations
- > List Methods
- > Demo: List Operations
- > Tuple Methods
- > Demo: Tuple Operations
- > Sets Methods
- > Dictionary Methods
- > Demo: Dictionary Operations
- > Key Takeaway

Lesson 03 - Conditional Statements and Functions

- > Learning Objective
- > Expressions
- > Conditional Statement
- > Demo - Conditional Statement
- > Loops - for loop
- > Loops - while loop
- > Demo - Loops
- > Functions
- > Demo - Functions
- > Key Takeaway

Lesson 04 - Error Handling and File Operations

- > Learning Objective
- > File Handling
- > Demo - File Handling
- > Errors
- > Exceptions
- > Demo - Errors and Exceptions
- > Logging
- > Demo - Logging
- > Python Debugger(Pdb Module)
- > Demo - Python Debugger
- > Objects and Classes
- > Objects and functions
- > Demo - Object Oriented Programming
- > Key Takeaway

Lesson 05 - Shell Scripting and Django

- > Learning Objective
- > Shell Scripting
- > Sys, OS and Sub-Process module
- > Reading Writing Files and Working with Date-time Module
- > Demo - Shell Scripting in Python
- > Web Scrapping
- > Demo - Web Scrapping using Beautiful Soup
- > Django - Intro and Architecture
- > Demo - Django Installation
- > Key Takeaway

Live Virtual Class **Curriculum:**

Lesson 01 - Python Basics

- > Introduction
- > Software Installations and Setup
- > Assisted Practice: Install Python IDLE
- > First Python Script
- > Data Types
- > Input /Output Functions
- > Assisted Practice: Basics of Python

Lesson 02 - Data Operations

- > Data Type Conversion
- > Data Operations
- > Assisted Practice: Data Operations
- > String Methods
- > Assisted Practice: String Operations
- > List Methods
- > Assisted Practice: List Operations
- > Tuple Methods
- > Assisted Practice: Tuple Operations
- > Sets
- > Dictionaries
- > Assisted Practice: Dictionary Operations

Lesson 03 - Conditional Statements and Functions

- > Expressions
- > Conditional Statements
- > Assisted Practice: If else
- > Loops
- > Assisted Practice: For Loop Iterations
- > Assisted Practice: while Loop Iterations
- > Functions
- > Assisted Practice: Functions

Lesson 04 - Error Handling and File Operations

- > File Handling
- > Assisted Practice: File Handling
- > Errors and Exceptions
- > Assisted Practice: Errors and exceptions
- > Debugging in Python
- > Assisted Practice: Logging
- > pdb Module
- > Assisted Practice: pdb Print Command
- > Assisted Practice: next and step Commands
- > Assisted Practice: Breakpoints
- > Assisted Practice: unt Command
- > Assisted Practice: display Command
- > Assisted Practice: w Command
- > Object-Oriented Programming
- > Assisted Practice: Classes and Objects

Lesson 05 - Shell Scripting and Django

- > Shell Scripting
- > Shell Scripting with Python
- > Assisted Practice: Shell Scripting in Python
- > Web Scraping
- > Django
- > Assisted Practice: Web scraping

Course End **Project:**

Employee Salary Appraisal

As the head of a company's human resources department, you have to design a set of rules or parameters you consider to be important for employee appraisal. To do this you will have to create a username and password for the interface you are creating, then create a class that has the parameters needed for the appraisal, such as rating, discipline, and contribution. You then must design an equation for appraisal calculation based on class attributes.

About Us:

Simplilearn is the world's #1 online bootcamp provider that enables learners through rigorous and highly specialized training. We focus on emerging technologies and processes that are transforming the digital world, at a fraction of the cost and time as traditional approaches. Over one million professionals and 2000 corporate training organizations have harnessed our award-winning programs to achieve their career and business goals.

For more information, please visit our website:

<https://www.simplilearn.com/mobile-and-software-development/python-development-training>



simplilearn.com

Simplilearn is the world's #1 online bootcamp for digital economy skills training focused on helping people acquire the skills they need to thrive in the digital economy. Simplilearn provides outcome-based online training across technologies and applications in Data Science, AI and Machine Learning, Cloud Computing, Cyber Security, Digital Marketing, DevOps, Project Management, and other critical digital disciplines.

Through individual courses, comprehensive certification programs, and partnerships with world-renowned universities, Simplilearn provides millions of professionals and thousands of corporate training organizations with the work-ready skills they need to excel in their careers. Based in San Francisco, CA, and Bangalore, India, Simplilearn has helped more than one million professionals and 2,000 companies across 150 countries get trained, acquire certifications, and reach their business and career goals. With over 1,000 live classes each month, real-world projects, and more, professionals learn by doing at Simplilearn. Ongoing industry recognition for the company includes the 2020 Aegis Graham Bell Award for Innovation in EdTech and the 2020 Stevie® Gold Award for Customer Service Success.

India - United States - Singapore

© 2009-2019 - Simplilearn Solutions. All Rights Reserved.

The certification names are the trademarks of their respective owners.