Techvanto Academy SUMMER TRAINING



PYTHON PROGRAMMING

Python is a powerful, interpreted, general-purpose programming language. It is used in web development, data science, creating software prototype, and so on. Python's design focuses on code readability with its significant indentation.

Duration: 30-45 Days

Visit us: techvantoacademy.com

BENEFITS BY TECHVANTO ACADEMY:

- 1. Internship and Full-Time job offer after training
- 2. An ISO Certificate of completion will be provided by Techvanto Academy
- 3. Learn technology from Industry Experts.
- 4. 90% Practical Internship
- 5. Live Classes
- 6. Placement Interviews

Demand of Python Programming

As of August 2019, Python was the most popular programming language based on how often its tutorials were searched on Google. (Source: PYPL index) Python programming is in high demand for jobs. Based on the number of job postings on one of the largest job search platforms, Indeed.com.

OUR CLIENTS:



NIT JALANDHAR



IIT KANPUR



IIT BHUBANESWAR



PANJAB UNIVERSITY



LPU JALANDHAR



OSMANIA UNIVERSITY



IIMT NOIDA



MOTIHARI BIHAR



Many more....

IIIT DM JABALPUR



JOB PROFILES IN PYTHON:

- 1. SOFTWARE ENGINEER
- 2. PYTHON DEVELOPER
- 3. RESEARCH ANALYST
- 4. DATA SCIENTIST
- 5. DATA ANALYST
- 6. SOFTWARE DEVELOPER

AVERAGE PACKAGE IN PYTHON:

Here are some starting salary midpoints according to payscale.com:

- 1. Software Developer: \$71,557
- 2. Sr. Software Developer: \$110,250
- 3. Data Scientist: \$96,674
- 4. DevOps Engineer: \$63,645

TOP RECRUITERS OF PYTHON:

- 1. Nokia
- 2. Netflix
- 3. Google
- 4. Facebook
- 5. Amazon
- 6. IBM
- 7. Walt Disney Feature Animation







NETFLIX



1. INTRODUCTION TO PYTHON

- 1. What is python?
- 2. What is the future scope?
- 3. Application Areas, Features, Advantages
- 4. Understanding the command window and Script window
- 5. Environment Set
- 6. History of Python
- 7. Version of Python
- 8. Feature of Python
- 9. Execution of Programs



2. PYTHON VARIABLES, DATA TYPES, OPERATORS

- 1. What is Variable?
- 2. Assign Variables
- 3. Data Types
- 4. Types of Operators
- 5. Arithmetic Operators
- 6. Relational Operators
- 7. Assignment Operators
- 8. Logical/Boolean Operators
- 9. Identity Operators
- 10. Membership Operators
- 11. Bitwise Operators
- 12. Operators Precedence & Assosciativity



3. PYTHON CONDITIONAL STATEMENTS/CONTROL STATEMENTS/LOOPS/TYPE CASTING

- 1. if Statements
- 2. if-esle Statements
- 3. elif Statements
- 4. nested if-else Statements
- 5. for loop
- 6. while loop
- 7. break statements
- 8. continue statements
- 9. pass Statements
- 10. Python Data Type Casting

4. PYTHON NUMBER/STRINGS/LIST TUPLE

- 1. Mathematical Function, Random Function & Trigonometric Function
- 2. Accessing Strings & Basic Operators
- 3. String slices & String Built-in Function
- 4. Accessing List, List Operations
- 5. Working with List & List slices
- 6. Aliasing & Cloning
- 7. List Comprehension & deleting List
- 8. Built-in functions for List
- 9. Tuple
- 10. Creating, Accessing, Modifying & Deleting Tuple
- 11. Renaming Tuple & its Built-in function

5. PYTHON DICTIONARY/SETS/ DATE & TIME

- 1. Introduction to Python Dictionary
- 2. Creating, Accessing, Deleting Dictionary
- 3. Built-In Functions
- 4. Introduction to Python Sets
- 5. Declaring Sets & Operations on Sets
- 6. The time Module
- 7. The Calender Module



6. PYTHON FUNCTION/MODULE

- 1. Defining a Function
- 2. Calling a Function
- 3. Types of Functions
- **4. Function Arguments**
- **5. Anonymous Functions**
- 6. Global & Local Variables
- 7. Introduction to Module
- 8. import Statement
- 9. from...import Statement
- 10. from...import* Statement

7. FILE HANDLING/ EXCEPTION HANDLING

- 1. Introduction to Python File Handling
- 2. Opening & Closing Files
- 3. Reading & Writing Files
- 4. Rename & Remove Files
- 5. The Directories
- 6. Error in Python Program
- 7. Types of Exception
- 8. Handling Exception in Python
- 9. Raising Exception
- 10. User Defined Exception



8. PYTHON OOPs CONCEPT/ MULTITHREADING/ MAIL SENDING

- 1. Class & Object
- 2. Attributes
- 3. Inheritance, Overloading & Overriding
- 4. Interface & Abstraction
- 5. thread & Starting a thread
- 6. threading a module
- 7. Synchronizing thread
- 8. Multithreaded priority queue
- 9. Introducing about mail sender
- 10. Execute Mail program
- 11. Attachment with file & sending multiple mail



9. PYTHON REGULAR EXPRESSION/ DATABASE CONNECTION/ INTERACTING WITH NETWORK

- 1. Match Function
- 2. Search Function
- 3. Matching Vs Searching
- 4. Modifiers
- 5. Patterns
- 6. Database Connections
- 7. Executing queries & Transactions
- 8. Handling Error
- 9. Socket in Python
- 10. TCP/ IP Client & Server
- 11. Creating a Client/ Server Program/ Executing Socket Program



10. INTERACTING WITH NETWORKS/GUI/ PYTHON WEB SCRAPING

- 1. Socket in Python
- 2. TCP/IP Client & Server
- 3. Creating a Client/ Server Program
- 4. Executing Socket Program
- **5. Tkinter Programming**
- 6. Tkinter widgets
- 7. Scrape all the details of any website
- 8. Built-in Functions

11. IDEA ABOUT PYTHON IP/DS/ML/AI

This section will give you the basic idea about using of python. in various other fields like Image Processing, Data Science, Machine Learning & Artificial intelligence:

- 1. Introduction to Python Image Processing
- 2. Image Processing
- 3. Loading Video
- 4. Reading Image
- 5. Saving a capture video
- 6. Introduction to Data Anlaysis in Python
- 7. plotting of graph

12. PROJECTS

- 1. Number Guessing
- 2. Contact Book
- 3. Python Story Generator
- 4. Youtube Video Downloader
- 5. Python Website Blocker
- 6. Desktop Notifier App
- 7. URL Shortener using Python
- 8. Scientific calculator using Python

DOUBT SESSION