



Python Training



Course Overview:

Python Training will give you the complete idea on Python Programming and their fundamentals on practical automation applications. The Python course modules, topics-end projects, and assignments in the Python course cover data operations, strings, conditional expressions, error handling, shell scripting, web scraping.

Training Features:

- 8X higher interaction in live online classes conducted by industry experts
- 50 Hrs. live Classes of Python Developer with Interview Preparation
- 3 real-time industry projects with hands-on preparation
- Unlimited Interview Opportunities with Placement Support
- Industry-recognized course completion certificate

Delivery Mode:

- Online Live Virtual Instructor Led Training

Target Audience:

The Basic Requirement to start a career as an Python, you'll need a Bachelor's degree or at least 1+ years of experience in Information Technology (IT). A Bachelor's degree in Technology justice will help you get the job.

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:

- Complete at least 85 percent of the course or attend one complete batch
- Successful completion and evaluation of the project



Python Basics: This section involves the basic concepts of the variables and their importance. This also includes the compiler & interpreter knowledge with the different versions and its differences in python.

- Importance of PYTHON PATH and PATH Variable
- Concepts of Compiler, Interpreter difference between them
- Properties of python
- version Difference

Variable and Variable concepts: This section deals with how to declare, initialize, swap, reference the variables with the same and different datatypes. How syntactically it is different from other technologies. Spacing also called indentation concepts.

- Declaration
- Initialization
- Swapping
- Indirect referencing
- Type identification
- Syntax
- Indentation

Operators and its classification: Different types of operators present in the python and its usage. this section also deals with some of the system functions such as print, input, int, etc.

- Arithmetic Operators [+ , - , * , / , % , // , **]
- Comparison Operators [> , < , >= , <= , == , !=]
- Logical Operators [and , or , not]
- Assignment Operators [+= , -= , *= , /=]
- Membership Operators [in , not in]
- Ternary Operators print , input , int , float , type , str functions

Conditional Statements: Types of conditional statements, execution of the statements based on the boolean output of the conditional statements along with the importance of the indentation in python.

- if statement and its examples
- if-else statement
- Indentation and structure of the conditional statements.
- nested if, nested if-else
- if-elif-else and its importance



Course Curriculum:

PYTHON DATA TYPES AND SYSTEM DEFINED FUNCTIONS:

This section of python comprises of the system related concepts like data types, system-defined functions with practical implementations. System Module concept. how to import the system defined modules and its uses.

Python Data types like Numbers , Strings , Lists , Tuples , Dictionaries etc
difference between Normal and module function eg math , random.

Number functions: The functions which works on the number inputs are number functions. This section also comprise system defined number functions .

- abs , max , min
- math.ceil , math.floor , round,
- random functions like : choice , shuffle , randrange , uniform

String Functions and string Operators: The functions which work on the string inputs are number functions. This section also comprises system defined string functions.

- string operators like + , * , [] , [:] , in , not in
- case related functions like capitalize , upper , lower , title , swapcase
- max , min , len
- ljust , rjust , center , lstrip , rstrip , strip
- count , index , find , replace split , join , startswith , endswith , reversed , sorted
- validation functions like isalpha , isdigit , isalnum , isupper , islower

Lists, operators, and functions: This section comprises of the list concepts such as operators and functions. List are the part and parcel when it comes dealing with files. This section also includes Indexing , creation , manipulation and deletion for the lists. practical implementations with files using lists.

- List operators + , * , [] , [:] , in , not in
- List fundtions like len , max , min
- append , extend , index , insert , pop
- deep copy and shallow copy
- remove , sort , reverse
- map , reduce , filter

Tuple, Operators and functions : Tuples are immutable list . Here we deal with the difference between lists and tuples . Importance of the tuples over the list, Indexing , access and deletion of the tuples.

- tuple operators + , * , [] , [:] , in , not in
- difference between list and tuple
- tuple functions len , max , min , copy
- map , reduce , filter



Dictionary operators and Functions: Here we know about the key – value pairs. Has concepts . User defined indexing and its importance over the system defined indexes used in lists and tuples along with the Dictionary operators and functions. Difference between list and dictionary

dictionary operators like [] , in , not in
dictionary functions like len , keys , values , items
get , fromkeys , setdefault

USER-DEFINED CONCEPTS :

In the above section 2, we seen every function or module used is system defined. This section mainly focuses on user-defined elements like user-defined functions, types of user-defined functions and its importance. Return statement. user-defined modules how can user-defined modules are imported etc.

Exception Handling: This section consists of handling the exceptions using try and except block. Importance of the word Exception and system defined exceptions. User defined exceptions its importance. assert statement.

- try , except block
- System defined exceotions
- User defined exception
- assert statement
- finally block

Files: This section is for creation, reading and writing of the files which are Ascii files , binary files etc except non ASCII files like pdf , excel files. Creation , deletion, Read , write and append operations in files. file handlers

- file functions like open , read , readline , readlines , write , writeline , writelines , close , seek , tell
- file modes like r, w, a, r+, w+, a+, rb, wb, ab

User-Defined Functions: here we deal with user defined fuctions its types based on how arguments passed. Importance of the return statement. difference between user defined and system defined functions

- types of user defined functions like
- Required and positional arguments
- required and nonpositional Keyword arguments
- default arguments
- Variable-length arguments

user-defined modules: This section includes Importance of the user defined modules , use of __init__.py file. Also how to create a module using folder and also using the files. difference between import and from keywords.

- import statement
- from statement
- difference between import and from statement
- importance of __init__.py file
- alias naming in python
- Importing one python script in another



ADVANCED CONCEPTS :

OOPS: OOPS whose abbreviation is object oriented programming system. This section deals with the real time programming examples .Importance of objects , object methods , class methods difference between them . Importance of self keyword.

- Class sstructure
- importance of objects
- class methods and object methods
- Importance of self , __init__ , __name__ , __dict__ , __str__ .
- importance of hasattr(), type(), issubclass(), isinstance(), super() functions
- class Variables and static variables

Regular Expression: Regular expression is mainly used for the dynamic grepping or replacing of the data based on the pattern anchors.

- pattern anchors
- functions like match , search , findall , sub , compile
- Excel Files: This section deals with using openpyxl module for excel file related tasks such
- How to open excel file in Read and Write and append mode
- difference between load_module and module function
- create excel file and add data dynamically in excel file
- Read existing file and append data
- Read data dynamically from excel file
- max_row , max_column and sheetnames functions

Database: Database is a storage where we can store the data in the rows and columns. In this section we deal with the database concepts such as

- Use of the Mysql database
- How to connect to the database using the connect method
- functions like cursor , execute , fetch , fetchall , close and its importance.
- control functions such as db.commit and db.rollback and its importance
- how to eexecute the query in python and fetch the data.

Iterators: This section deals with the handling of the memory with respect to the variables. Importance of iterators

- list and tuple iterator
- String Iterator
- next() function and its importance in iterators

Generators :

- differnce between yield and return statement
- use and importance of the yield over return statement

Decorators :

- What is decorator
- importance and use of decorators
- JSON , YAML File concepts
- PDF , Word , CSV , Excel Files [Opening , Closing , DataExtraction , Creation]

Threading: This section deals with the concept of threads which is called as parallel processing. what is threading and its importance

- functions like Thread , join , start
- threading.main_thread()
- threading.current_thread()
- synchronus and asynchronus threads
- Synchronization between threads
- lock.acquire() and lock.release()
- threading.Lock()

smtplib Module: This module is responsible for sending emails

- how top send the text email
- how to send the HTML email
- adding attachments in the mail
- functions like SMTP , sendmail , quit() , MIMETEXT

OS Networking module: This module contains the functions which are used to perform operating system related tasks.

- importing os module
- functions in os module like : access() , listdir() , mkdir() , makedirs() , rmdir() , removedirs()
- file functions such as remove() , rename() , copy() , chmod() , stat()
- link() , symlink() , readlink()
- environ , getenv() , setenv()
- Webpage Automation
- screen scraping
- web interface automation

Selenium Python: Selenium Python Introduction and Installation.

- Navigating links using get method.
- Interacting with Webpage.
- Locating single elements.
- Locating multiple elements.
- Locator Strategies – Selenium Python.
- Writing Tests using Selenium Python.

About Us:

dridhOn is the world's #1 online live virtual training 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 achieve their career and business goals.

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