

# PYTHON PROGRAMMING

Dr Kumar academy

### Unlock the Power of Python

#### **MODES OF TRAINING**

- WEEKEND BATCH: Weekend batches will be having classes one day per week for 3 – 4 hours each. You can join either Saturday / Sunday batch.
- FAST TRACK: You can attend daily, so that you can complete the course in 1/5<sup>th</sup> of the time.
- > ONLINE TRAINING: If you can't attend the classroom sessions, you can register for our online sessions.
- CORPORATE TRAINING: We customize the course according to your project requirements and train the engineers of your organization.

#### About the Course:

The Course, PYTHON Programming designed to provide knowledge and skills to enable the student, a finest industry-oriented Python Developer, with an easy and entertaining method of fast learning!!! Take advantage of one of the most powerful, effective and intuitive programming languages ever! Python is extremely simple to learn, yet very powerful! That is why so many big players like Google, Yahoo!, Dropbox and even NASA are using it. There will be well-designed challenging, practical and focused hands-on exercises.

### WHAT MAKES PYTHON UNIQUE

- Python is one programming language, one can do end to end development ranging from Scripting / Automation – Software Development – Web Development. It is a wholesome language
- Python is among very few languages with extremely low syntactic overhead giving it tremendous expressive powers.
- Many other features which include overlapping feature set, like generator expressions, optimal performance of iterators, meta classes to increase class

customization, etc...

Of course, an open source (FREE)



### WHO CAN JOIN

- Software Engineers, who are into ETL / Programming / Bigdata and exploring for great opportunities
- Managers, who are looking for the best technology supplement to implement their projects / products in the organization, to limit challenges of challenges
- Any Graduate / Post-Graduate, who is aspiring a great career towards the promising technologies.

### WHY DR. KUMAR ACADEMY

- Industry savvy trainer with real time experience with the technology
- Implemented an effective teaching methodology to enable easy and fast learning
- Job oriented course design
- Limited students per Batch, to enable more attention to every trainee
- Interactive learning at the learners convenience.



### WHAT WE PROVIDE

Once you register for course at Dr. Kumar Academy, you are eligible for the following services from us:

- Class room training Theory classes supplemented with Practical
- All the presentations used during the classroom teaching & other material
- Set of hands-on exercises with detailed step-by-step procedures to solve them
- All software that are needed to work out the Hands-on exercises.
- Interview questions that are recently & frequently asked by the employers.
- Customized Learning plan, based on your background
- Certificate of Course completion & Star performance
- If you have any queries even after completion of the course, you can call / meet / mail us directly, we will be there to help you out.





#### Course Curriculum

- + Getting Started with Python
  - Introducing Python
  - Installing Python on Windows
  - Introducing Python IDLE
  - Programming in Interactive Mode
  - Programming in Scripting Mode

+ Types, Variables and Input / Output

- Using quotes and escape character
- String Concatenation and Repeater Operators
- Using Mathematical Operator with Numbers
- Understanding Variables
- Getting User Input with input()
- Using Strings Methods
- Converting Values

🖶 Flow Control in Python

- The if Statement
- The else Clause
- Using elif Clause
- The while Statement
- Avoiding infinite loops
- Values as conditions
- Using Logical Operators
- Planning Your Program with Pseudocode

#### 🖊 For Loops with Tuples

- Using for Loops
- Using Sequence Operators and Functions with Strings
- ➢ Finding Length with len()
- Using the in Operator
- Indexing and Slicing Strings
- Using Random Module
- Using Tuples
- Sequence Operators and Functions with Tuples
- Using Dictionaries
- ➤ Accessing

#### ∔ Dictionaries

- Using Dictionaries
- Accessing Dictionary values
- > Adding, Replacing and Deleting key-value pairs
- Functions: get(), keys(), values() and items()

#### 📥 Lists in Python

- Creating and Using Lists
- Len() with Lists
- In Operator with Lists
- Indexing, Slicing and Concatenating
- > Deleting List Element with del
- Using Lists Methods such as appends(), sort(), reverse(), count(), pop(), remove(), insert() and index()
- Using Nested Sequence

Understanding Shared References

#### 🖶 Functions in Python

- Defining Functions
- Using Parameters and Return Values
- Using Arguments and Defaults Parameters
- Using Global Variables and Constants
- Variable Scope
- > References

🖶 Object-Oriented Python

- Introduction to Object-Oriented Python
- Creating Classes, Methods and Objects
- Using Constructor and Attributes
- Using Class Attributes and Static Methods
- Understanding Object Encapsulation
- Private Attributes and Methods
- Controlling Attribute Access
- Creating and Accessing Properties
- Combining Objects
- Using Inheritance to Create New Classes
- > Altering Behaviour of Inherited Method
- Understanding Polymorphism

File Input and Output and Exceptions

- ➢ The open Function
- Input from Text Files
- Output to Text Files



- Storig Complex Data in Files with Pickles and Shelve
- Handling Exceptions
- Using try Statement with except Clause

#### 📥 Modules

- Using Modules in Programs
- Writing Modules
- Importing Modules
- Using Imported Functions and Modules

## **CONTACT US**

#### **Coimbatore Office:**

No. 2, Railway Station Road, Ettimadai, Coimbatore – 641112 Email: <u>vksusilkumar@drkumaracademy.co.in</u> / <u>vksusilkumar@yahoo.co.in</u> Mobile: 9380502425

