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Empower Your Future with Data Analytics.

Embark on a journey to master data analytics with Python. Our comprehensive course covers everything from Python fundamentals to advanced data analysis and visualization techniques. Whether you're a beginner or a seasoned professional, this course will equip you with the skills needed to excel in the rapidly growing field of data analytics.

Why choose GroWise Academy?

- <u>Expert Instructors:</u> Learn from seasoned professionals with extensive experience in data analytics and Python programming.
- <u>Hands-on Experience:</u> Engage in practical projects to apply your learning in real-world scenarios.
- <u>Comprehensive Curriculum:</u> Cover all essential aspects of data analytics from basic Python installation to advanced data visualization.
- <u>Comprehensive Study Materials:</u> Receive well-organized, printed course materials for ongoing reference and study.
- <u>Certification:</u> Earn a certification to boost your credentials and career opportunities.

COURSE CURRICULUM

MODULE 1: Installation of Python

- <u>Overview of Python:</u> Explore the history and applications of Python in various fields.
- <u>Installation</u>: Step-by-step guide to installing Python software.
- <u>IDEs and Editors:</u> Introduction to Python Editors & IDEs such as PyCharm, Jupyter, etc.
- Script Execution: Learn different modes of running Python scripts



MODULE 2: Operators and Flow Control

- <u>Operators</u>: Understand Arithmetic, Modulo, Floor Division, Relational, Conditional Logical, and Membership Operators.
- Flow Control: Master Simple If, If-Else, Nested If-Else, and Elif.
- <u>Loops:</u> Implement flow control statements with while and for loops.

MODULE 3: Data Types and Variables

- <u>Data Types:</u> Explore Primitive and Core Data Types, both Mutable and Immutable.
- <u>Data Structures:</u> Get hands-on with Lists, Tuples, Dictionaries, and Sets.
- <u>Functions and Methods:</u> Work with various functions and methods of List and Tuple Data types

MODULE 4: Loops and Functions in Python

- Loops: Delve deeper into While and For loops.
- <u>Functions:</u> Introduction to functions, types of functions and decorators in functional programming.

MODULE 5: OOPS in Python

- OOPS Concepts: Learn about Class and Objects, Encapsulation, Polymorphism, Inheritance.
- <u>Methodology:</u> Understand Method Overloading and Method Overriding



MODULE 6: Exception Handling & Multithreading in Python

- <u>Exception Handling:</u> Use try, except, else, and finally blocks for handling exceptions.
- <u>Multithreading</u>: Introduction to multithreading, with examples using both OOPS and Functions

MODULE 7: File Handling and Comprehension

- <u>File Handling:</u> Introduction to Jupyter Notebook, different modes of modifying files, and working with CSV and JSON files.
- Comprehension: Master List Comprehension in Python.

MODULE 8: Data Analysis with MySQL

- MySQL Basics: Installation, introduction, and working with MySQL, including features, variables, and data types.
- <u>Database Management:</u> Create databases, tables, and views, manage users, and work with various MySQL commands.
- Advanced MySQL: Explore keys, clauses, joins, and functions.

MODULE 9 & 10: PANDAS for Data Analysis

- Introduction to Pandas: Installation and use for data analysis.
- <u>Data Cleaning:</u> Techniques for dealing with duplicates and missing values.
- Pandas Data Frame: Functions, operations, and working with data.
- <u>Numpy Integration:</u> Learn Numpy for advanced mathematical operations and array handling.



MODULE 11: Data Visualization

- Introduction to Visualization: Learn the basics of data visualization.
- *Tools:* Install and use Matplotlib and Seaborn.
- <u>Visualization Techniques:</u> Create Line Plots, Scatter Plots, Bar Plots, Histograms, and Pie Charts

MODULE 12: Projects

- Web Scraping with Pandas: Flipkart Product Review Project.
- <u>Data Analysis Projects</u>: Work on projects based on JSON files,
 Django, Covid-19 Data, Titanic Passenger Data, and Zomato Data



Start your journey to becoming a DATA ANALYTICS EXPERT!

Enroll today and unlock new career opportunities!



