



Mathematics & Coding

Chapter 1 : Introduction to Math Programming with Python

- Features
- Software installation
- Variables
- Identifiers
- Data types
- Input / output Functions
- Type casting

Chapter 2 : Operators in Math Programming

- Arithmetic operators
- Comparison operators
- Logical operators
- Membership operators

Chapter 3 : Conditional Statements in Math Programming

- If statement
- If else statement
- If elif ladder statement
- Nested if statement

Chapter 4 : Loops in Math Programming

- While loop
- Else with while loop
- For loop
- Nested for loop

Chapter 5 : Control statements in Math Programming

- Continue
- Break
- Pass

Chapter 6 : Functions in Math Programming

- General function
- Function with arguments

Chapter 7 : Script Programming

- Running script using cmd
- Redirecting Output

Chapter 8 : Strings in Math Programming

- Accessing value in string
- Updating string
- Escape characters
- String formatting
- String functions

Chapter 9 : List in Math Programming

- List functions

Chapter 10 : Set in Math Programming

- Set functions

Chapter 11 : Dictionary in Math Programming

- Dictionary functions

Chapter 12 : Modules in Math Programming

- Inbuilt Modules
- User defined Modules

Chapter 13 : Exception Handling

- Built in exception
- Handling an exception

Chapter 14 : GUI Creation in Math Programming

- Tkinter, Windows, label, Text,Button
- Message Box, Entry, Listbox
- PIL library

Sr. No	<u>Live Projects</u> : Mathematics & Coding
1	Quadratic Equation Solver
2	Calculator Design
3	Guess a number game
4	World of Geometry – Calculate Volume & Area
5	Thermometer Design
6	Arranging and sorting
7	Captcha Generator for login
8	Graphify – Plot mathematical graphs
9	To-do list Application
10	KBC – Quiz Competition