# Curriculum:

## 1. Introduction to Python data types and objects

a)  Python Data types.
b)  Declaring variables with assignment operators.
c)  Numbers and Arithmetic Operators.
d)  Introduction to strings.
e)  Indexing and slicing.
f)  String properties and methods.
g)  Print formatting with strings.
h)  *Split method in string.
i)  Boolean, comparison operators.

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## 2. Introduction to Python data structures

a)  Lists.
b)  Dictionaries.
c)  Tuples.
d)  Sets.

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## 3. Python Control flow statements

a)  Conditional Statements.

b) Boolean expressions for conditional statements FAQs.
c) Elif and Else statements.
d) For loops.
e) While Loops.
f) For vs While loop FAQs.
g) Break, continue.
h) Zip and enumerate.
i) Lists comprehensions.
j) Other useful operators.

## 4. Python Methods and Functions

a) Methods in Python.
b) Functions in Python.
c) Variable scopes.
d) Coding exercises.
e) Function practice exercises.
f) Lambda expressions, maps.
g) Nested statements.

## 5. Python Milestone Project 1

## 6. Object Oriented Programming

a) Introduction.
b) Attributes and classes.
c) Methods.
d) Inheritance and Polymorphism.
e) Special methods.

## 7. Modules and Packages

a) The standard library.
b) Importing local scripts.
c) Pip install and PyPi.
d) _name_ and _main_.

e)  Third party libraries.

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## 8. Errors and Exception Handling

a)  Error and exception handling.

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## 9. Python Milestone Project 2

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## 10. Python Decorators and Generators

a)  Decorators.
b)  Generators.

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## 12. Final Python Project

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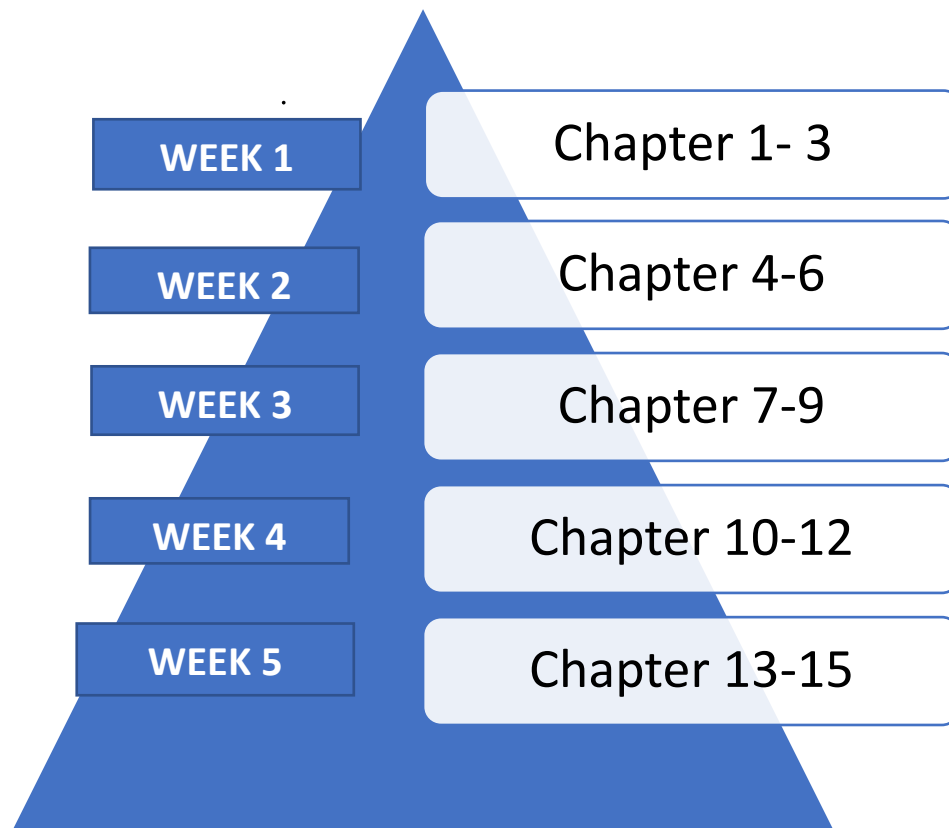
## 13. Advanced Python Modules

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## 14. Advanced Python Objects and Data structures

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## 15. Introduction to GUI

## Important Instructions –

- **There will be small Quizzes and Practice Questions after every module.**

- **The recordings and notes for coming week will be uploaded on Github every Sunday or Monday by midnight.**

- **You will all get a week to work on the assignments and submit the answers to the quiz and practice questions by the time you finish it.**

# Python Workshop                    - Nidhi Ghorpade

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| Week | Chapters |
|------|----------|
| WEEK 1 | Chapter 1- 3 |
| WEEK 2 | Chapter 4-6 |
| WEEK 3 | Chapter 7-9 |
| WEEK 4 | Chapter 10-12 |
| WEEK 5 | Chapter 13-15 |

**Weekly distribution of topics being covered.**

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