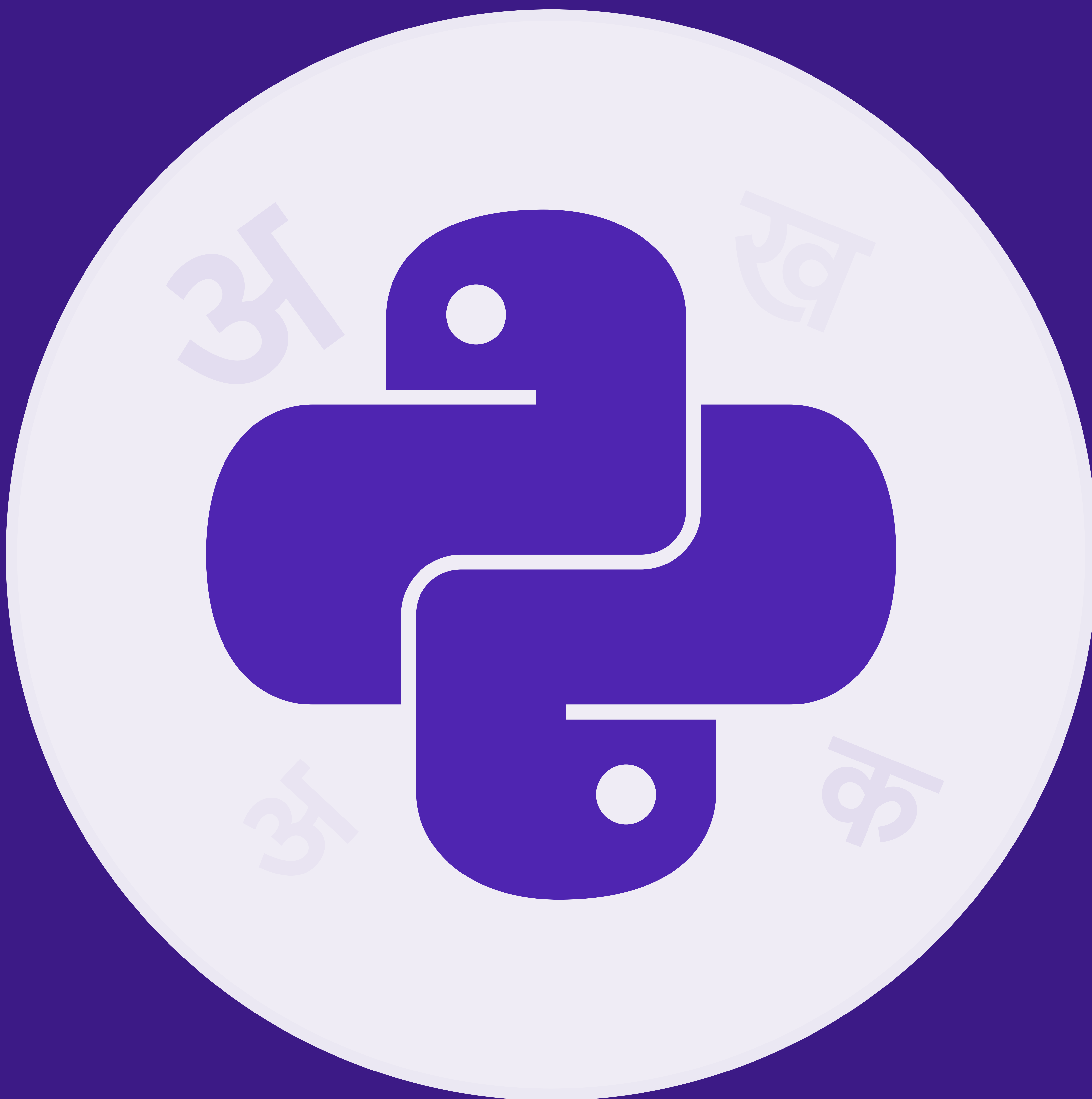




GeeksforGeeks

# PYTHON FOUNDATION (HINDI)



DETAILED COURSE SYLLABUS

## PYTHON BASIC

- Why Do We Need Programming Languages
- Background Part 2 (Computer Organization & Operating System)
- Why Do We Need Programming Languages
- Python Introduction
- Python Standard and Implementations
- How Python Programs are Executed
- Python Programming Terminology
- Python Installation and First Program
- Comments in Python

## VARIABLES AND DATA TYPES

- Variables in Python
- Swap two Variables
- Id() in Python
- Type() in Python
- List Introduction
- Tuples in Python
- Set in Python
- Dictionary in Python
- Type Conversion in Python

## INPUT AND OUTPUT IN PYTHON

- print() in Python
- input() in Python

## OPERATORS

- Arithmetic Operators in Python
- Logical Operators in Python
- Identity Comparison Operators in Python
- Membership Test Operators in Python
- Bitwise Operators in Python Part 1

- Bitwise Operators in Python Part 2
- Arithmetic Progression nth Term in Python
- Geometric Progression nth Term in Python
- Sum of Natural numbers
- Find Last Digit of a Number
- Day Before N Days

## FLOW CONTROL

- if, else and elif in Python
- Even-Odd in Python
- Largest of three in Python
- Leap Year in Python
- Calculator Program in Python

## LOOPS

- Loops In Python
- While Loops in Python
- Range function in Python
- For Loop In Python
- Table of A Number
- Break In Python
- Continue In Python
- Nested Loop in Python
- Square Pattern in Python
- Printing Triangle Pattern in Python
- Inverted Triangle in Python
- Pyramid Pattern in Python
- Count Digits
- Factorial in Python
- GCD in Python
- LCM in Python
- Fibonacci
- Check for Prime in Python
- All Divisors Of A Number
- Optimizations of All Divisors and Prime

## FUNCTIONS

- Functions in Python
- Applications of Functions
- How Functions Work
- Default Arguments
- Keyword Arguments
- Variable Length Arguments
- Parameter Passing in Python
- Returning Multiple Values in Python
- Global Variables in Python
- Find First Digit
- Prime Factorization

## STRINGS

- Strings in Python
- Escape Sequences and Raw Strings
- Formatted String in Python
- String Operations Part (1)
- String Operations Part (2)
- String Comparison in Python
- Pattern Searching in Python
- Check For Palindrome In Python
- Reverse A String in Python
- Decimal to binary in Python
- Binary to Decimal Conversion

## LIST

- Slicing (List,Tuple And String)
- Get Smaller Elements
- Separate Even and Odd
- Comprehensions in Python
- Average or Mean of A List
- Count Distinct Elements in A List
- Check if A list is Sorted



## PROJECTS

- Tic Tac Toe
- Covid Help Bot