

Python 50+ Video Playlist Outline

1. Introduction to Python + Installation & Setup
2. Your First Python Program (Hello World, print())
3. Variables and Data Types
4. Input from User & Type Casting
5. Operators in Python (Arithmetic, Logical, Comparison)
6. Strings Basics + String Methods
7. Escape Sequences and Comments
8. Numbers, Math Functions, Random Module
9. Lists Basics (Indexing, Slicing, Adding, Removing)
10. List Methods & Looping through Lists
11. Tuples Basics
12. Sets Basics
13. Dictionary Basics (key-value pairs)
14. Dictionary Methods & Looping
15. If-Else Statements
16. Nested If & Elif
17. While Loops Basics
18. For Loops Basics
19. Range() Function with Loops
20. Loop Control (break, continue, pass)
21. Nested Loops
22. Pattern Printing with Loops
23. Functions Basics (def, calling)
24. Function Parameters & Return Values

25. Default Arguments, Keyword Arguments
26. Recursion in Python (Basic Example)
27. Lambda Functions
28. Map, Filter, Reduce (Basics)
29. Modules in Python (import, custom modules)
30. Built-in Modules (math, random, datetime)
31. File Handling (open, read, write)
32. File Handling – More Methods
33. Exception Handling (try-except)
34. Finally & Multiple Exceptions
35. Python JSON (Reading & Writing)
36. Lists Advanced (List Comprehension)
37. String Formatting (f-string, format)
38. Advanced String Operations
39. Dictionaries Advanced (Nested, Comprehension)
40. Sets Advanced (Operations, Union, Intersection)
41. Mini Projects (2-5)
42. Functions – More Practice Examples
43. Object Oriented Programming – Intro
44. Classes & Objects
45. Constructors & Methods
46. Inheritance Basics
47. Polymorphism & Encapsulation
48. Final Project