Python basic learning playlist

by CodeWithHarry

**Basic tutorial**

1. Beginner friendly full python tutorial teaser.
2. What is programming & why learn Python ?
3. Downloading Python and Pycharm installation.
4. Using modules & Pip in Python.
5. Writing our first Python program.
6. Using Python as a calculator.
7. Comments, Escape Sequences & Print statement.
8. Variables, Datatypes and Typecasting.
9. String slicing and other functions in Python.
10. Python lists and list functions.
11. Dictionary and it’s functions explained.
12. **Python exercise 1 | Apni dictionary.**
13. Sets in Python.
14. If, Else and Elif conditionals in Python.
15. ***Python* *exercise 1 solution and your answers | Apni dictionary.***
16. **Python exercise 2 | Faulty calculator.**
17. For loops in Python.
18. While loops in Python.
19. Break & Continue statements in Python.
20. ***Python exercise 2 solution | Faulty calculator***
21. **Python exercise 3 | Guess the number.**
22. Operators in Python.
23. Short hand If, Else notation in Python.
24. Functions and Docstrings.
25. Try, Except Exception handling in Python.
26. Python file I/O basics.
27. Open(), Read() & Readline() for reading file.
28. ***Python exercise 3 solution | Guess the number.***
29. Writing and appending to a file.
30. **Python exercise 4 | Astrologer’s Stars.**
31. Seek(), tell() & more on Python files.
32. Using with block to open Python files.
33. **Python exercise 5 | Health Management System.**
34. Scope, Global variable and Global keyword.
35. Recursions | Recursive vs Iterative approach.
36. ***Python*** ***exercise 4 solution | Astrologer’s Stars.***
37. Anonymous/Lambda functions in Python.
38. ***Python exercise 5 solution | Health Management System.***
39. Using Python external & build in modules.
40. F-strings & String formatting in Python.
41. **Python exercise 6 | Game development : Snake, Water, Gun (Rock, Paper, Scissor)**
42. \*args and \*\*kwargs in Python.
43. Time module in Python.
44. Virtual Environment & Requirment.txt .
45. Enumurate function.
46. How import works in Python ?
47. If\_\_name\_\_==”\_\_main\_\_” usage & necessity.
48. Join function in Python.
49. Map, Filter & Reduce in Python.
50. ***Python exercise 6 solution | Game development : Snake, Water, Gun (Rock, Paper, Scissor)***
51. **Python exercise 7 | Healthy Programmer.**
52. Decorators in Python.
53. Classes & Objects (OOPS).
54. Creating our first class in Python
55. Instance & Class variable.
56. Self & \_\_init\_\_() (Constructors).
57. Class methods in Python.
58. Class methods as alternative constructors.
59. Static methods in Python.
60. Abstraction & Encapsulation.
61. Single Inheritance.
62. Multiple Inheritance.
63. Multilevel Inheritance.
64. Public, Private & Protected Access Specifiers.
65. Polymorphism in Python.
66. Super() and Overriding in Classes.
67. Diamond shape problem in Multiple Inheritance.
68. Operator Overloading & Dunder methods.
69. Abstract Base Class & @abstractmethod.
70. Setters & Property decorators.
71. Object introspection.
72. **Python mini project – 1 | OOPs library.**
73. Generators in Python.
74. Python comprehensions.
75. Using Else with For loops.
76. Function Caching in Python.
77. Else & Finally in Try Except.
78. Coroutines in Python.
79. ***Python exercise 7 solution | Healthy Programmer.***
80. Os Module.
81. **Python exercise 8 | Oh soldier prettify my folder.**
82. Request module for HTTP requests.
83. Json module.
84. **Python exercise 9 | Akhbaar padhke sunaao.**
85. Pickle module.
86. **Python exercise 10 | Pickling Iris.**
87. Regular expressions.
88. Converting .py to .exe .
89. ***Python exercise 8 solution | Oh soldier prettify my folder.***
90. Raise in Python + Examples.
91. Python ‘is’ vs ‘==’. What’s the difference ?
92. Python 2.x vs Python 3.x.
93. ***Python exercise 9 solution | Akhbaar padhke sunaao.***
94. Creating a command line utillity in Python.
95. ***Python exercise 10 solution | Pickling Iris.***
96. Creating a Python package using Setuptools.
97. **Python exercise 11 | Regex email extractor.**
98. Learning path for Python web development.
99. Python GUI develoment – Learning path.
100. Machine learning & Data science learning path.
101. ***Python exercise 11 solution | Regex email extractor.***
102. ***Mini Project******- 1 solution | OOPs library.***
103. Conclusion & way forward.

**Practice problem**

1. **Practice problem 1 (Easy).**
2. ***Practice problem 1 (Easy) solution.***
3. **Practice problem 2 (Easy).**
4. ***Practice problem 2 (Easy) solution.***
5. **Practice problem 3.**
6. ***Practice problem 3 solution.***
7. **Practice problem 4.**
8. ***Practice problem 4 solution.***
9. **Practice problem 5.**
10. ***Practice problem 5 solution.***
11. **Practice problem 6.**
12. ***Practice problem 6 solution.***
13. **Practice problem 7 | Creating a search engine.**
14. ***Practice problem 7 solution | Creating a search engine.***
15. **Practice problem 8 | Fake multiplication table.**
16. ***Practice problem 8 solution | Fake multiplication table.***
17. **Practice problem 9 | Jumbled funny names.**

**Python projects**

1. ***Project 1 | Iron man Jarvis AI desktop voice assistant.***
2. ***VS Code tutorial + Python setup.***
3. ***Project 2 | Coding Flappy Bird game (with source code).***
4. ***Project 3 | Third umpire decision review system (DRS Gully Cricket).***
5. ***Project 4 | Indian Railways Announcement software.***
6. ***Corona Virus | Python programming solution to the problem.***
7. ***Covid – 19 | Creating a realtime Corona Virus outbreak notification system using Python programming.***
8. ***Django tutorial.***
9. ***I automated the chrome dinosaur game using Python.***