

Week	Topics and Tasks	Sample Problems	Resources (Practice)	Resources (Theory)
1	Installing Python, IDE. Variables, input-output, data types.	1) Hello, world! 2) Read a name and print a greeting. 3) Sum of two numbers.	Stepik Codewars	Python Documentation YouTube: Python Crash Course
2	Conditional statements, loops.	1) Check if a number is even. 2) Multiplication table. 3) Numbers from 1 to N.	LeetCode	RealPython: if-else
3	Functions, working with modules.	1) factorial(n). 2) Maximum of three numbers. 3) Use sqrt() from math.	Stepik Algorithms	RealPython: functions
4	Strings and collections.	1) Reverse a string. 2) Unique elements of a list. 3) Count letters.	Codewars	RealPython: strings Documentation: collections
5	Files (txt, JSON, CSV).	1) Count lines in a file. 2) Write a list to CSV. 3) Load JSON.	Pandas	Documentation: files
6	OOP: classes, inheritance.	1) Class Dog. 2) Class Student. 3) Class Shape + Circle, Square.	Stepik: OOP	RealPython: OOP
7	Exceptions, decorators, generators.	1) Division by zero. 2) Logging decorator. 3) Fibonacci generator.	LeetCode	Exceptions Decorators
8	API and parsing.	1) Get USD exchange rate. 2) Parse news. 3) Save JSON.	BeautifulSoup	Requests
9	Flask: web applications.	1) Hello in browser. 2) /about page. 3) Display name from URL.	Flask	Flask articles
10	Testing and automation.	1) pytest factorial(). 2) Rename files. 3) unittest for calculator.	pytest	pytest theory
11	Git and GitHub.	1) Create a repository. 2) Commit + README.md. 3) Push to GitHub.	Learn Git Branching	Pro Git book
12	Interview preparation.	1) Binary search. 2) Implement a stack. 3) 5 LeetCode Easy problems.	NeetCode	Python Roadmap Design Patterns