Python for Web Developers			45 Days
Chapter	Title	Content	Estimated Days
1	Fundamentals of Python	Introduction to Python	1
		Python Environment Setup, IDE Setup	
		Hello World in Python	
		Running Python Programs	
2	Data Types and variables	Variables	5
		Numbers (boolean, int, long, float, complex)	
		Strings, String Formatting methods	
		Lists	
		Tuples	
		Dictionary	
		Sets	
		Unpacking iterables in python	
		Type conversion	
3	Basic Operations	Arithematic Operations	1
		Assignment Operations (single, multiple)	
		Relational Operations	
		Logical Operations	
		Bitwise Operations	
		Membership Operations	
		Identity Operations	
4	Decision Making / Conditionals	if statement	1
		if else statement	
		if elif else statement	
5	Loops and Pattern Generation	For Loop	3
		While Loop	
		Break, continue, and pass statements	
		Nested Loop	
		Pattern Generation	
5	Comprehensions and Pattern Generation	List Comprehension	2
		Set Comprehension	
		Dictionary Comprehension	
6	Functions	Defining a function	4
		Calling a function	
		the return statement	
		the pass statement	
		Local Variables and Global variables	
		required vs default arguments	
		arguments and keyword arguments	
		function with variable length arguments	
		Anonymous or Lambda functions	

7	Object Oriented Programming	Introduction to Object Oriented Programming Class Class Variable and instance variable Methods the __init__() method and the self parameter built-in class attributes Encapsulation in python _ , __ signs Object Overrides Operator Overloading Inheritance @classmethod, and @staticmethod	5
8	Python Modules and packages	Introduction to modular programming __init__.py file An example of modular python program importing the module from keyword	1
9	File I/O	open() function close() method write() method read() method with keyword	1
10	Exceptions and Exception Handling	Introduction to Exceptions in Python Standard Errors try, except keyword try except else finally keyword raise keyword User Defined Exceptions	1
11	Debugging in Python	Setting up a debugger in VS Code Breakpoint and its usage Evaluating values at render time updating values at render time	1
12	Virtual Environments	Introduction to virtual environments virtualenv, venv, pipenv, pyenv, conda, ... Why virtual Environment How to setup Virtual Environment activating and deactivating the venv packages in the global module vs venv	1

13	Web Development with Python	Introduction to Web Development	10
		Web development Frameworks in python	
		Flask	
		Django	
		When to use Flask	
		When to use Django	
		Model View and Controller approach	
		Templates	
		Django Documentation	
		Installing Django	
		setting up a django project	
		applications in django	
		settings.py file	
		models.py, urls.py, views.py files	
		database connection in django	
		setting up environment variables with python decouple	
		url pattern best practices	
		django functional views	
		django class-based views	
		Http Request and Response class	
		Querydict Objects	
		static files and media files	
		URL regular expressions	
		django rest framework	
14	Basic Front-end web development with React. JS	Javascript Basics	8
		ES6 Basics	
		HTML, and CSS basics	
		React Basics	