

Python Programming from Zero to Mastery - Course Outline		Study Hours
Level 1 - Basics		
Introduction and Getting started with Python		
Week 1: Introduction and Setup		
Class - 1	<i>What is a programming language ? & How it works?</i>	1
	<i>Difference between Interpreter and compiler</i>	
	<i>History of python.</i>	
	<i>Difference between Python 2 vs Python 3</i>	
	<i>How does actually python works?</i>	
	<i>Online Python Interpreters</i>	
	<i>Installing Everything on our machine (Optional)</i>	
	<i>Say Hello to the world. :)</i>	
	<i>HomeWork That's not cool! I know :)</i>	2
Class - 2	<i>What are data types in python programming ??</i>	1
	<i>Comments and Printing</i>	
	<i>Working with Arithmetics in python & Math functions in Python</i>	
	<i>Operator Precedence</i>	
	<i>Binary and complex numbers</i>	
	<i>Exercises in class</i>	
	<i>Homework Assignments.</i>	2
Class 3	<i>Variables</i>	1
	<i>Expressions and Statements</i>	
	<i>Assignment Operator</i>	
	<i>Working with strings</i>	
	<i>Strings Concatenation</i>	
	<i>String Operations</i>	
	<i>Type Conversions and Escape sequences</i>	
	<i>Built in Functions and Methods for strings in python, (string formatting)</i>	
	<i>Strings Indexes and the concept of Immutability</i>	
	<i>Exercises in class and Homework</i>	2
Week 2: Python Basics cont.		1
Class 4	<i>Booleans</i>	
	<i>Type Conversions</i>	

	<i>Our first program to check user's password !!!!!</i>	
	<i>Lists, List Slicing and Matrix</i>	
	<i>List Methods and patterns</i>	
	<i>List Unpacking</i>	
	<i>Exercises in class and Homework</i>	2
Class 5	<i>What is None?</i>	1
	<i>Dictionaries and key/value pairs</i>	
	<i>Dictionary Methods</i>	
	<i>Tuples and Sets</i>	
	<i>Tuples and Sets Methods</i>	
	<i>Cool Exercises</i>	
	<i>Homework...</i>	2
Class 6	<i>Conditional Logic in Python. (Breaking the flow)</i>	1
	<i>Indentation in Python</i>	
	<i>Truthy vs false statements</i>	
	<i>Ternary Operator, Short Circuiting and Logical Operators</i>	
	<i>"is" and "=="</i>	
	<i>Exercises and Homework</i>	2
Week 3: Python Basics cont.		
Class 7	<i>For Loops and Iterables</i>	1
	<i>Let's make a tricky counter ... <</i>	
	<i>range() and enumerate()</i>	
	<i>Exercises</i>	
	<i>While Loops</i>	
	<i>break, continue, pass</i>	
	<i>standard input and output (GUI in Console)</i>	
	<i>Exercises and Homework</i>	2
Class 8	<i>Functions</i>	1
	<i>Parameters and Arguments</i>	
	<i>Default Parameters and Keyword Arguments</i>	

	<i>What is "return"?</i>	
	<i>Methods vs Functions</i>	
	<i>Exercises and Homework</i>	2
Class 9	<i>Docstrings</i>	1
	<i>*args and **kwargs</i>	
	<i>Walrus Operator</i>	
	<i>Scope and scope rules</i>	
	<i>global and nonlocal Keyword</i>	
	<i>Writing Clean Code</i>	
	<i>Exercises and Homework</i>	2
Class 10	<i>Python Installation on Windows/Mac or Linux</i>	1
	<i>Python Developer Tools</i>	
	<i>Sublime Text or Atom</i>	
	<i>Basic Terminal Commands</i>	
	<i>Using the Command Line/Terminal</i>	
	<i>Visual Studio Code</i>	
	<i>PyCharm</i>	
	<i>Code Formatting - PEP 8</i>	
	<i>Creating Virtual Environments</i>	
	<i>Jupyter Notebooks</i>	
	<i>Homework</i>	2
Exam - Project for Level 1		6
Solving basic problems of Katu 5.		