bodenseo

Agenda, Python Course

Day	Topics
DAY	1. The Origins of Python
	2. Starting with Python: The Interactive Shell
	3. Using the IPython notebook
	4. Executing a Script
	5. Data Types and Variables
	5.1. The special nature of variables in Python
	5.2. Sequential Data Types: Lists and Strings
	5.3. Dictionaries
	5.4. Sets and Frozen Sets
	5.5. copying vs. referencing data
	5.6. Shallow and Deep Copy
	6. Conditional Statements: if statement and ternary if
	7. input vs. raw_input
	8. Loops: While and for-loops with the Python „else"
	9. formatting output the classical and the Pythonic way
	10. Functions, global and local data, Parameter Passing in Function
	11. Context Managers
	12. Read and Write Files
	13. Modular Programming and Modules
DAY2	14. Using Regular Expressions and their usage in Python
	15. Lambda Operator, Filter, Reduce and Map
	16. List Comprehension
	17. sort and sorted with custom made sort criteria
	18. Iterators and Generators
	19. Exception Handling

	20. Object Oriented Programming
	20.1. Introduction
	20.2. Class and Instance Attributes
	20.3. Data Abstraction using getters and setters
	20.4. Properties
	20.5. Inheritance
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DAY3	21. Object Oriented Programming (continuation)
	21.1. Multiple Inheritance
	21.2. Magic Methods and Operator Overloading
	22. NumPy and SciPy
	23. Matplotlib
	24. Pandas (short introduction)