## Agenda, Basic Python Course

<table>
<thead>
<tr>
<th>Day</th>
<th>Topics</th>
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| DAY1 | 1. The Origins of Python  
2. Starting with Python: The Interactive Shell  
3. Using the IPython notebook and Spyder  
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, Sets and Frozen Sets  
  5.4. copying vs. referencing data, Shallow and Deep Copy  
6. Conditional Statements: if statement and ternary if  
7. Input |
| DAY2 | 8. Loops: While and for-loops with the Python „else“  
9. Functions, global and local data, Parameter Passing in Function  
10. Read and Write Files  
11. Modular Programming and Modules  
12. Lambda Operator, Filter, Reduce and Map  
13. List Comprehension  
14. sort and sorted with custom made sort criteria |