Python – A shot of inspiration for day to day analysis

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My programming background

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- If I can code, then surely you can do it even better!

Why code rather than use MS Excel?

 Increasing complexity of analyses



in my Spreadsheet

- Increasing complexity of analyses
- Spreadsheets cannot cope



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- Save time



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- Code exposes logic, a spreadsheet exposes the data



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- Spreadsheets cannot cope
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- Code exposes logic, a spreadsheet exposes the data
- Reduce human error
- Improve capability
- Enable continuous abstraction
- Focus on the more important tasks



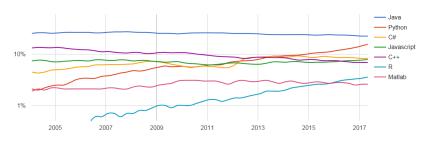
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What is Python?

Courtesy of Wikipedia:

- Python is a programming language
- Created by Guido van Rossum in 1991
- Two relevant versions: Python 2.7 and Python 3.x
- Python 2.x will not be developed much more

- Python is very popular and still gaining in popularity.
- Therefore, it has a very active and supportive community.



PopularitY of Programming Language [Carbonnelle, 2016]

Why Python?

Beginner friendly



Why Python?

- Beginner friendly
- Beautiful syntax



- Beginner friendly
- Beautiful syntax
- Dynamically typed



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- Dynamically typed
- Object Oriented



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- Open Source
- Large and active Stack Overflow community



Treehouse - Python course



Python course [Treehouse]

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- Intro to Comp Sci ... in Python at MIT



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Python course [Treehouse]

Recommended packages and tools

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Tools:

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- PyCharm or Visual Studio Code for editing
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- MS Visio to create diagrams to aid Systems Engineering

Typical data analysis procedure

Parse a text file

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- Manipulate the data

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- Oisplay graphs

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- Parallelisation possible but not native and not easy
- Backward compatibility not guaranteed

Conclusion

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- If you need help, please feel free to get in touch!

References

Pierre Carbonnelle. Popularity of programming language.

http://pypl.github.io/PYPL.html, 2016.

Treehouse. Treehouse. https://teamtreehouse.com/.