Python, Cloud and Automation

1. Introduction

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Outline

Disclaimer

Probably contains over-simplications and some errors in an attempt to simplify.

1. Part 1:
   - What is Python?
   - How can it be used?
   - How can I learn?

What Python is not

Some common misconceptions

- A statistical package
- A program
- A self contained framework

What is Python?

Python is a high-level, general-purpose programming language. Its design philosophy emphasizes code readability with the use of significant indentation. Its language constructs and object-oriented approach aim to help programmers write clear, logical code for small- and large-scale projects. (wikipedia)

How can we use it?

1. **Extraction, Transform and Load (ETL) Tasks**
   Reading data from (virtually) any source, transforming into required format and exporting.
2. **Automation of repetitive tasks.**
   Interacting with file system, using libraries to create PowerPoints, interacting directly with excel, read emails - the possibilities really are endless.
3. **Data Visualisation, Analysis and Econometrics**
4. **Full scale applications**
   Larger projects will span multiple categories (e.g Country Profile Report automation)[1]

[1] Current implementionation uses another language called JavaScript (Node.js) for the PDF generation.

How to learn Python

1. **I can't teach you.**
2. **Learning-by-doing**
   The **best** way to learn Python is to start writing it. There are multiple courses online, from free YouTube videos to paid courses but in-person courses will not help unless you are spending hours working alone figuring out.
3. **DataCamp.com**
   Combines very short videos with active excercices, it teaches concepts in a concise way and then forces you to get involved. It is also designed for ETL and statistics.

The Coding Learning Curve