Python, Cloud and Automation

1. Introduction

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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.
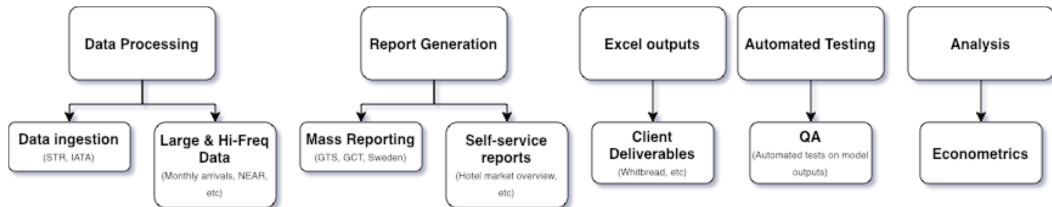
3. **Data Visualisation, Analysis and Econometrics**

4. **Full scale applications**
   Larger projects will span multiple categories (e.g Country Profile Report automation)[1]

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

Where can we use Python, Automation & Cloud

A general note

While Python is great for some use cases, particularly **data processing** and **analysis**, the main objective over the next few days is to bring about more awareness for automation in general, which is language agnostic - but Python is a good place to start.

How to learn Python

1 **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.

2 **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, statistics and data science.