

```
1 ---
2 output:
3   html_document: default
4   pdf_document: default
5   word_document: default
6 ---
7 # Chapter 1 - Introduction to Python
8 ---
9
10 [Python](http://www.python.org) is a very High Level, object-oriented, dynamic1, strong
    typing2, interpreted & interactive programming language.
11
12 ```comments
13 1. Dynamic Programming language: It at runtime executes many common programming tasks which static programming
    languages perform during compilation such as
14     - Computation of code at runtime and late binding
15     - alteration of Objects at runtime
16     - Assembling of code at runtime based on the class of instances
17
18 2. "strongly typed: Typing errors are prevented at runtime using the implicit type conversion, also it don't have
    static type checking, i.e. compiler don't check or enforce type constraint rules. The term duck typing is now
    used to describe the dynamic typing paradigm.
19 Duck typing is an application of the duck test in type safety. It requires that type checking be done at runtime
    only, and is implemented by use of dynamic typing or by reflection.
20 ```
21
22 It is also an open source language (with license compatible with the General Public License (GPL), but less
    restrictive, allowing Python to be even incorporated into proprietary products). Its specification is maintained
```

The language was created in 1990 by **Guido van Rossum**, at National Research Institute for Mathematics and Computer Science in the Netherlands (CWI) and had originally focused on users physicists and engineers. Python was designed from another existing language at the time, called ABC.

