Basic Python

BY-AMAN CHATURVEDI

Introduction

Python was created by Guido Van Rossum, and first released on 20 Feb,1991.

Python is a general purpose scripting language it is dynamically typed object oriented programming language which also support functional programming.

Python is the world first most used programming language the first version of the python programming language was 0.9.0 realized in the year 1991. The latest version of python is 3.10.

It supports Object Oriented programming approach to develop applications. It is simple and easy to learn and provides lots of high-level data structures.

Why python is named as python -

Python, the programming language, is named after the British comedy group Monty Python. Guido van Rossum, the creator of Python, was a fan of the group and named the language in tribute to them.

Features of Python

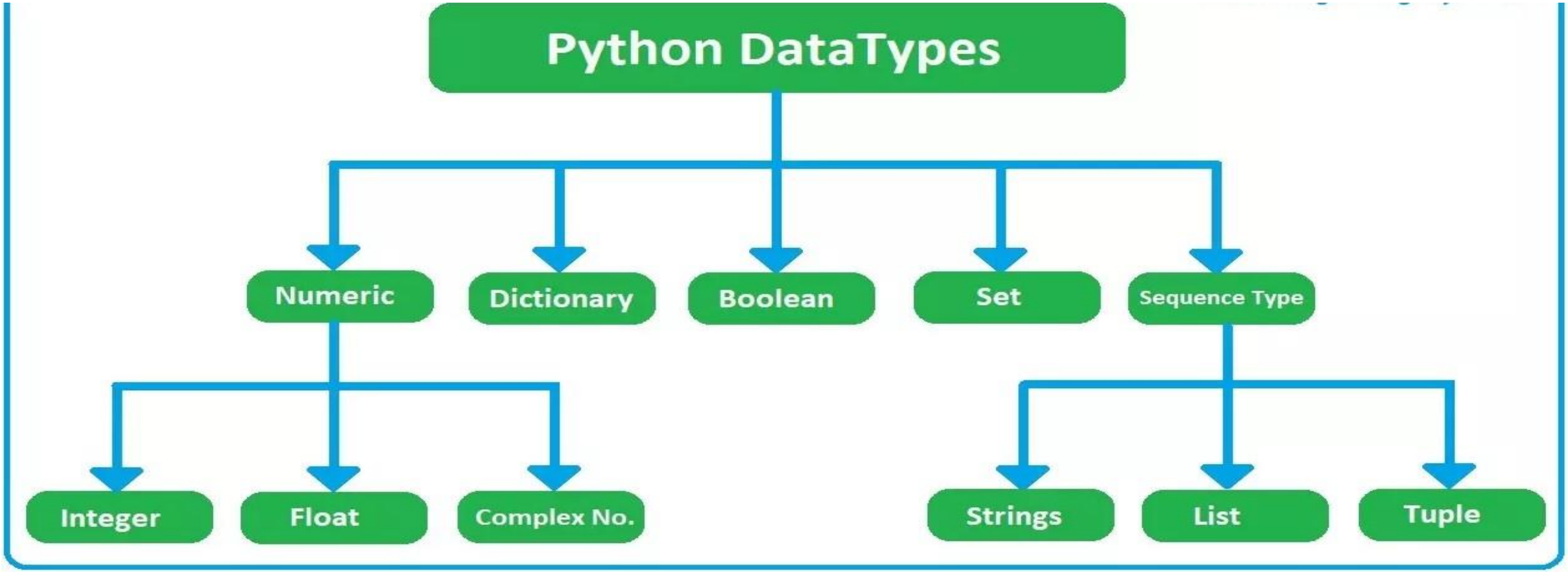
- Readable: Syntax is similar to English and so the language is readable.
- Large Standard library: Python has a very big library of predefined functions.
- Automatic memory management: Python support this feature which automatically allocates and free the memory whenever used.
- Supports Exception Handling: Python has an advanced feature of exception handling.
- Cross-Platform: Python can run on different operating systems such as windows, mac, linux etc.

Applications of Python

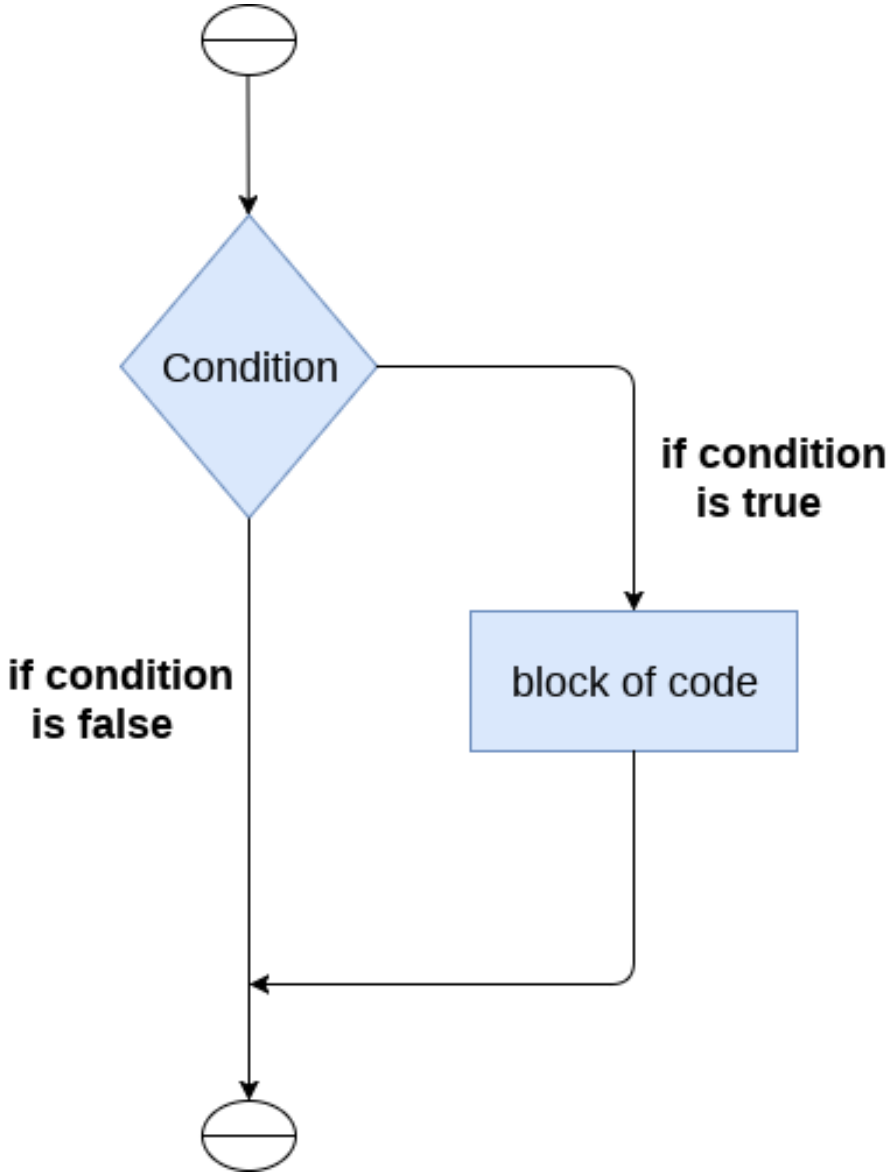
The biggest strength of python is huge collection of standard libraries which can be used for the following :

- Machine learning
- Artificial Intelligence
- Web Development
- Game Development
- Data science and Data visualisation
- GUI (Graphic User Interface)
- Web Scraping
- Business Applications
- Internet of things
- Scientific Computing
- Text processing
- Image processing

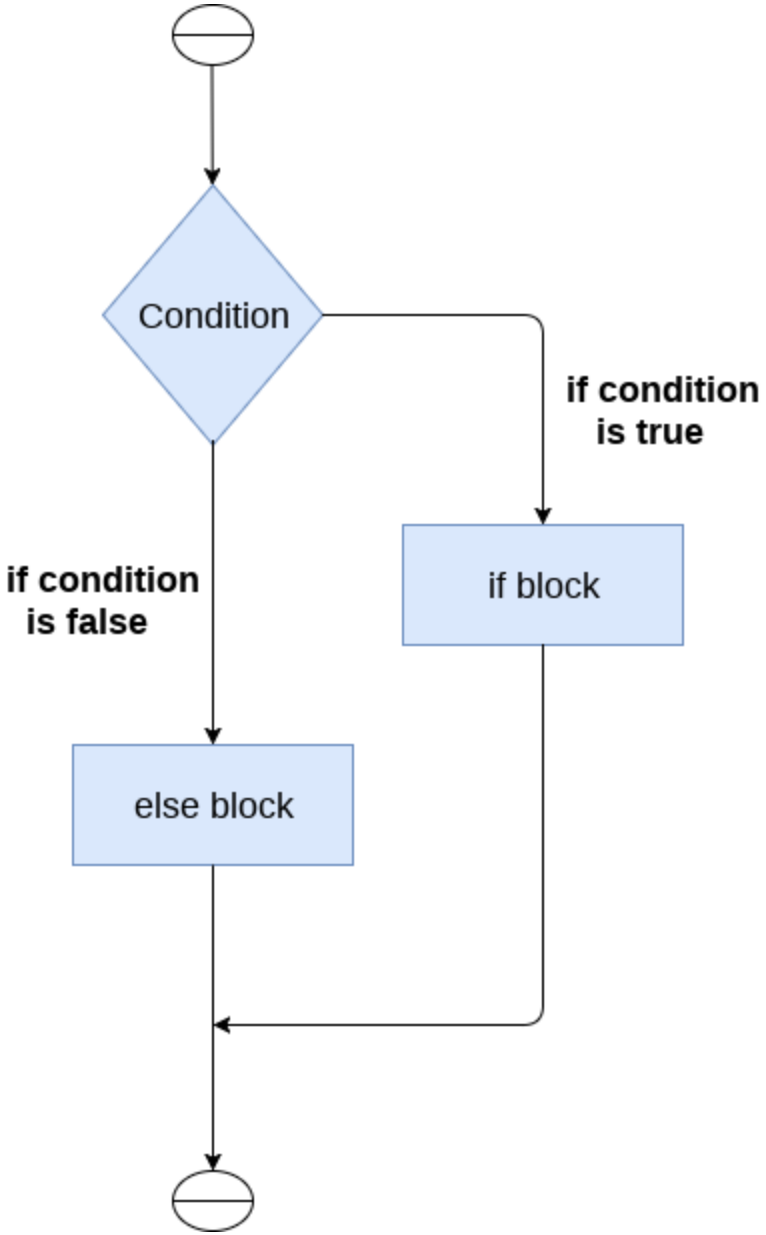
Python DataTypes



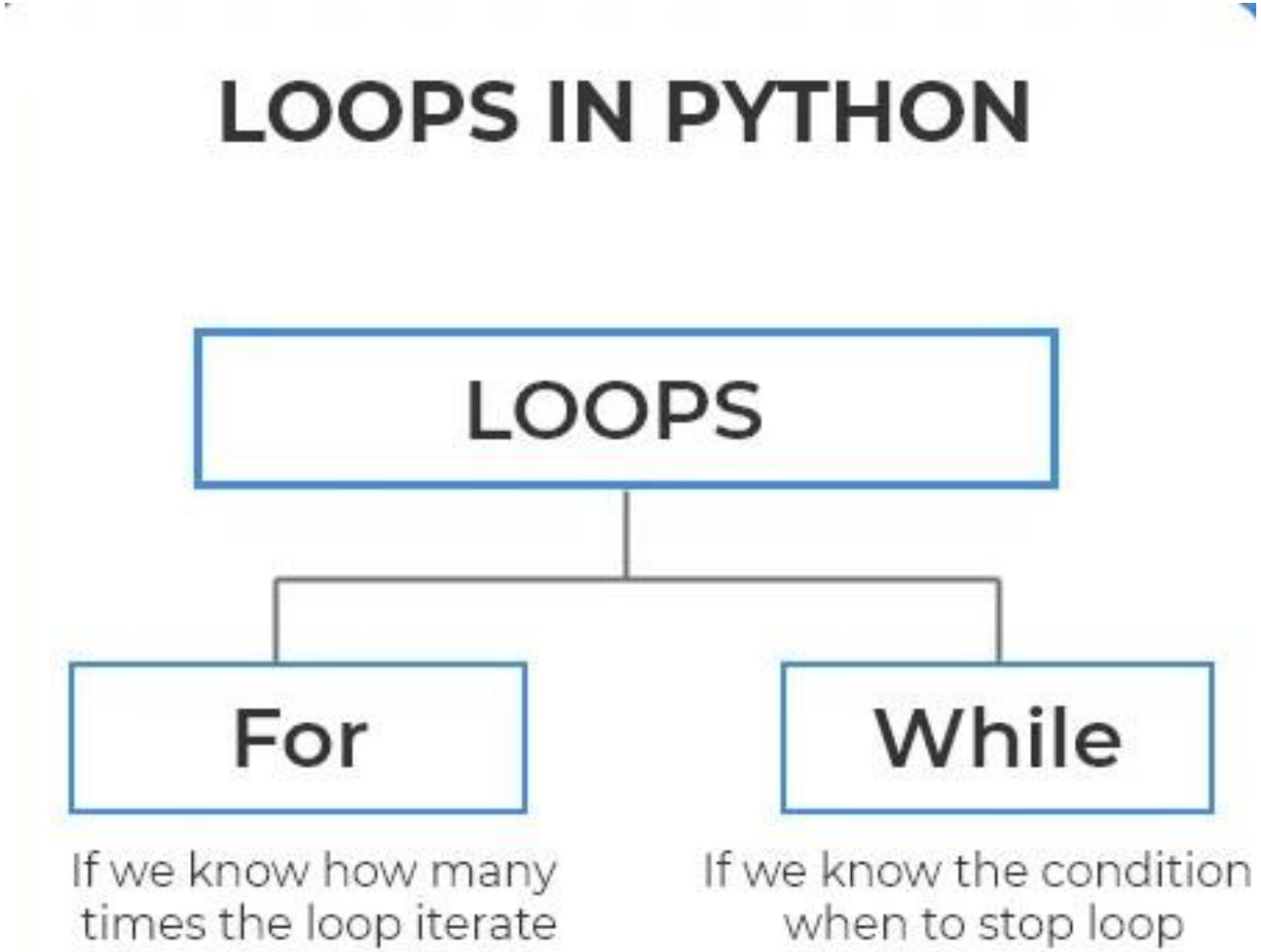
Decision Making in Python:



if statement



if-else statement


LOOPS IN PYTHON
LOOPS
For
While
If we know how many times the loop iterate
If we know the condition when to stop loop

Loops

Loops

Let's see a simple example of for loop in Python.

Input:

```
n = 4
for i in range(0, n):
    print(i)
```

Output:

0
1
2
3

Loops

Let's see a simple example of while loop in Python.

Input:

```
count = 0
while (count < 3):
    count = count + 1
    print("Hello Aman")
```

Output:

```
Hello Aman
Hello Aman
Hello Aman
```

Thank You