

# Day 1

## Python Overview

### What is Python

- Python is a dynamically typed, General Purpose Programming Language that supports an object-oriented programming approach as well as a functional programming approach.
- Python is also an interpreted and high-level programming language.
- It was created by Guido Van Rossum in 1989.

### Features of Python

- Python is simple and easy to understand.
- It is Interpreted and platform-independent which makes debugging very easy.
- Python is an open-source programming language.
- Python provides very big library support. Some of the popular libraries include NumPy, Tensorflow, Selenium, OpenCV, etc.
- It is possible to integrate other programming languages within python.

### What is Python used for

- Python is used in Data Visualization to create plots and graphical representations.
- Python helps in Data Analytics to analyze and understand raw data for insights and trends.
- It is used in AI and Machine Learning to simulate human behavior and to learn from past data without hard coding.
- It is used to create web applications.
- It can be used to handle databases.
- It is used in business and accounting to perform complex mathematical operations along with quantitative and qualitative analysis.