

# Python Basics

## Introduction to Python for Data Science and Machine Learning

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# What is it all about?

Python is a general-purpose programming language

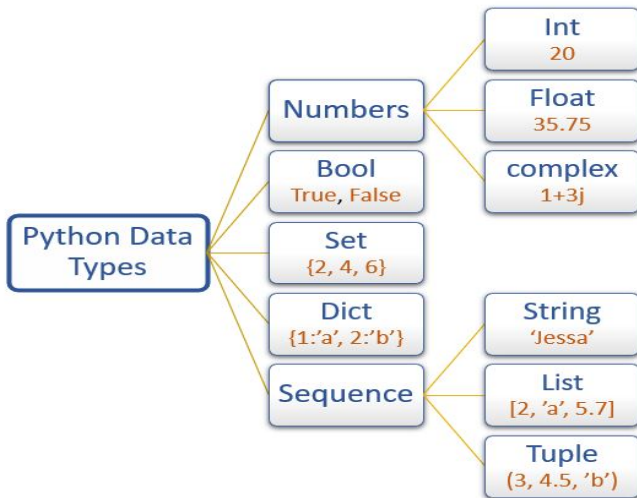
# Why Python??

- Supports modules and packages, which encourages program modularity and code reuse.
- It is easier to read and understand.
- It is versatile.
- It is beginner friendly, making it popular for entry-level coders.
- Python has a large and actively growing community that makes it easy to find solutions when stuck.

# Uses of Python

- Data analysis and visualization
- Data Science and machine learning
- Web and software development
- Task automation and scripting
- So much more

# Data Types



# Variables

A variable is a name given to a memory location. It is the basic unit of storage in a program.

- A variable name must start with a letter or the underscore character.
- A variable name cannot start with a number.
- Variable names are case-sensitive (name, Name and NAME are three different variables).
- The reserved words(keywords) cannot be used naming the variable. eg, print, sum, e.t.c

# Code Outline

- Variables
- Lists
- Dictionaries
- Sets

# Lets Get Coding!!