

Python

Full stack Skills Bootcamp

Introducing Python

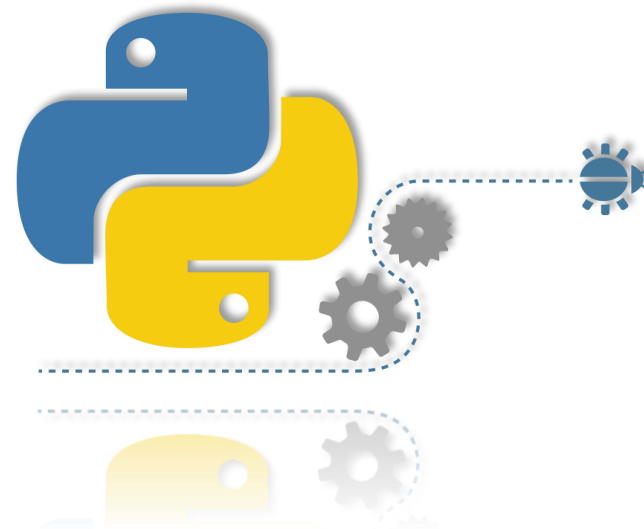
■ What is Python?

Python is a high-level, interpreted programming language known for its easy-to-read syntax and versatility.

■ History of Python.

Python, created by Guido van Rossum and first released in 1991, emphasizes code readability and supports multiple programming paradigms, including procedural, object-oriented, and functional programming.

■ Key Features of Python.



Data Types in Python

■ What are datatypes?

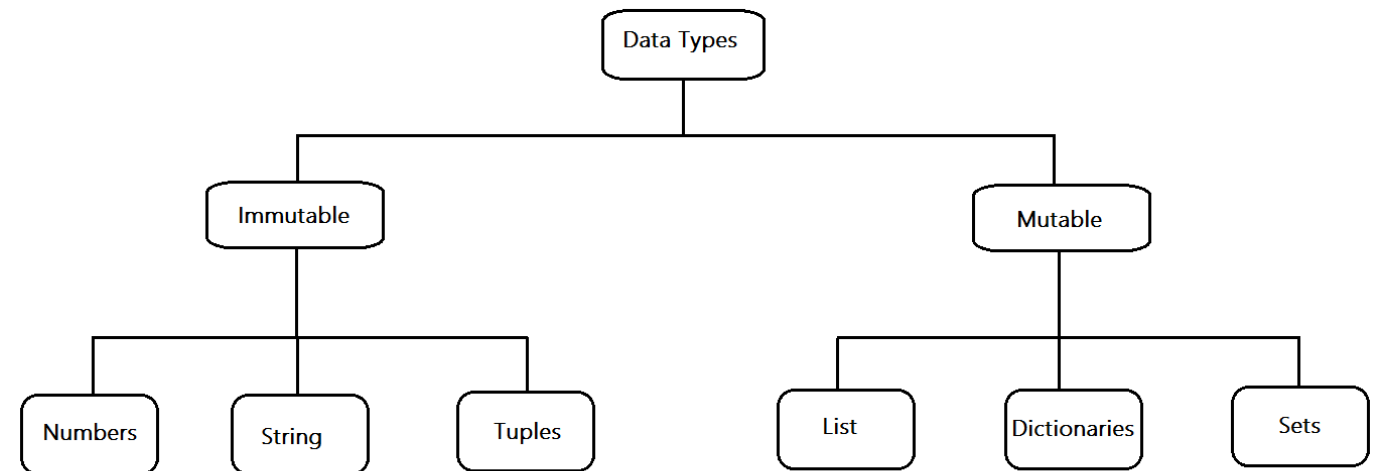
Data types classify the kind of data a variable can hold in programming.

■ Importance of datatypes.

Memory Management, Type Safety, Code Clarity

■ Key datatypes in Python

- Mutable
- Immutable



Variables in Python

■ What are variables?

Variables are symbolic names that store data values.

■ Creating constants.

```
python Copy code  
  
name = "Alice"  
age = 25
```



■ Variable Naming Conventions.

Should be descriptive, Use lowercase letters with underscores (snake_case)

Constants in Python

■ What are constants?

Constants are variables that are meant to remain unchanged throughout the program.

■ Creating constants.

python

Copy code

```
PI = 3.14159  
GRAVITY = 9.8
```



■ Naming Conventions.

By convention, constants are written in **uppercase**.

Conclusion

- Variables and constants are foundational concepts in Python.
- Understanding data types helps write efficient and error-free code.

