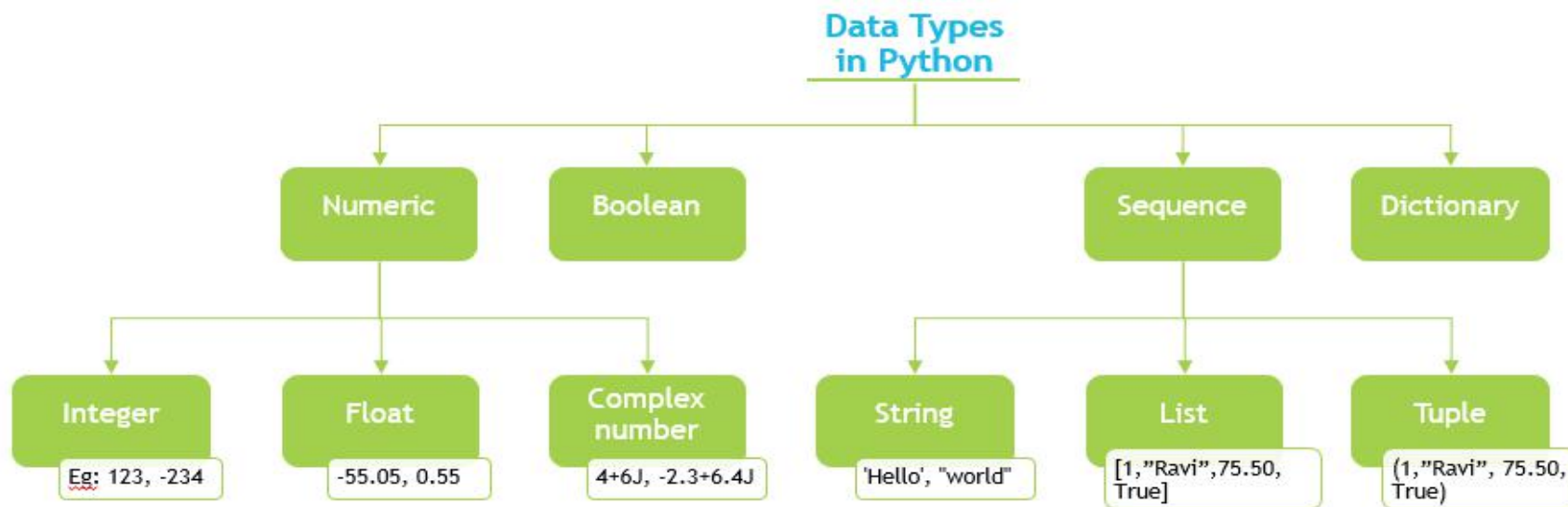


Data Types in Python

The built-in data types in Python are displayed below.



Numeric

Any representation of data which has numeric value. Python identifies three types of numbers – integer, float and complex number.

Integer Positive and negative whole numbers.

Examples: 1234, -234, 0x46 (hexadecimal number), 0O123 (octal number))

Note: In C and related programming languages such as Python, a hexadecimal number is prefixed with 0x and an octal number is prefixed with 0O.

Float Real numbers with a floating point representation in which the fractional component is denoted by a decimal or scientific notation

Examples: -55.550, 0.005, 1.32E10 (scientific notation))

Complex number A number with a real and imaginary component is represented as $a + bj$ in Python where a and b are floats and

$$j = \sqrt{-1}$$

Examples: $4+6j$, $-2.3+6.4j$

Note: The common mathematical representation of a complex number uses a $+bi$ with i being the imaginary part. But in electronics j is used because i already represent current and the next letter after i is j .

Boolean	Any representation of data which has two values denoted by True and False.
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Sequence	An ordered collection of similar or different data types. The built-in Sequence data types in Python are – String, List and Tuple.
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String	<p>A collection of one or more characters put in single, double or triple quotes.</p> <p>Examples: 'Hello', "Hello", "Hello", "Hello"</p>
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List	An ordered collection of one or more data items, not necessarily of same type, put in square brackets.
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Examples: [1,"Ravi",75.50, True]

Tuple An ordered collection of one or more data items, not necessarily of same type put in parentheses. The contents of a tuple cannot be modified – it is immutable - after the tuple is created.

Examples: (1,"Ravi", 75.50, True)

Note: Refer to the Helper Text to learn more about mutability.

Dictionary An unordered collection of data in key:value pair form. Collection of such pairs is enclosed in curly brackets.

Example: {1:"Superman", 2:"Wonder Woman", 3:"Thor", 4:"Hulk", 5:"Black Widow"}
