

Literals in Python

Literals in Python are constant values that are assigned to variables or used directly in code. Python supports several types of literals:

1. **String Literals:** Enclosed in single ('...'), double ("..."), triple single ("'...'"), or triple double quotes ("'''...'''").
2. **Numeric Literals:**
 - Integer Literals:** Whole numbers, which can be written in decimal, binary (0b...), octal (0o...), or hexadecimal (0x...) form.
 - Float Literals:** Numbers with a decimal point or in exponential (scientific) notation.
 - Complex Literals:** Numbers with a real and imaginary part, defined by a number followed by a j or J.
3. **Boolean Literals:** True and False, which represent the two truth values of Boolean logic.
4. **Special Literal:** None, which represents the absence of a value or a null value.
5. **Collection Literals:** Literals for creating collections like lists, tuples, dictionaries, and sets.
 - **List Literals:** Defined using square brackets [].
 - **Tuple Literals:** Defined using parentheses ().
 - **Dictionary Literals:** Defined using curly braces {} with key-value pairs.
 - **Set Literals:** Defined using curly braces {} with comma-separated values.