Use of Quotes and different types

In Python, quotes are used to denote strings, which are sequences of characters. There are three types of quotes used for defining strings: single quotes ('), double quotes ("), and triple quotes (''' or """). Each type has its specific use cases and behavior.

Single Quotes (') and Double Quotes (")

- Single quotes and double quotes can be used interchangeably to define strings.
- They are useful when you need to include apostrophes or quotation marks inside a string without escaping them.
- *Example:*

single_quoted_string = 'This is a single-quoted string.'

double_quoted_string = "This is a double-quoted string."

Triple Quotes (''' or `""")

- Triple quotes allow you to create multiline strings in Python.
- They preserve the line breaks and formatting within the string.
- Triple single quotes (''') and triple double quotes (""") are functionally equivalent.
- They are commonly used for docstrings (documentation strings) to provide documentation for functions, classes, modules, or scripts.

Example:

multiline_string = '''This is a
multiline
string.'''

- Triple quotes are also used when you need to include single quotes or double quotes inside a string without escaping them.

Example:

triple_quoted_string = '''She said, "Hello!"'''
Triple quotes are useful for defining regular expressions, SQL queries, or other text blocks that span multiple lines.

In summary, single quotes and double quotes are primarily used for single-line strings, while triple quotes are used for multiline strings, docstrings, or strings containing both single and double quotes.

The choice between single quotes and double quotes is mostly a matter of personal preference or coding style conventions within a project.