In Python, the str (string) data type provides several built-in methods. Here’s a list of all commonly used string methods:

**1. Case Manipulation**

* str.lower() – Converts all characters to lowercase.
* str.upper() – Converts all characters to uppercase.
* str.capitalize() – Capitalizes the first character.
* str.title() – Capitalizes the first letter of each word.
* str.swapcase() – Swaps uppercase letters to lowercase and vice versa.

**2. Formatting & Alignment**

* str.center(width, fillchar) – Centers the string in a given width.
* str.ljust(width, fillchar) – Left-aligns the string with padding.
* str.rjust(width, fillchar) – Right-aligns the string with padding.
* str.zfill(width) – Pads the string with leading zeros.

**3. Searching & Finding**

* str.find(sub, start, end) – Returns the index of the first occurrence of sub, or -1 if not found.
* str.rfind(sub, start, end) – Finds the last occurrence of sub.
* str.index(sub, start, end) – Like find(), but raises an error if not found.
* str.rindex(sub, start, end) – Like rfind(), but raises an error if not found.
* str.count(sub, start, end) – Counts occurrences of sub in the string.

**4. Checking String Properties**

* str.startswith(prefix, start, end) – Checks if the string starts with prefix.
* str.endswith(suffix, start, end) – Checks if the string ends with suffix.
* str.isalnum() – Returns True if all characters are alphanumeric.
* str.isalpha() – Returns True if all characters are alphabetic.
* str.isdigit() – Returns True if all characters are digits.
* str.isnumeric() – Returns True if all characters are numeric.
* str.isdecimal() – Returns True if all characters are decimals.
* str.isspace() – Returns True if all characters are whitespace.
* str.islower() – Returns True if all characters are lowercase.
* str.isupper() – Returns True if all characters are uppercase.
* str.istitle() – Returns True if the string is titlecased.

**5. String Modification**

* str.strip(chars) – Removes leading and trailing whitespace (or specified chars).
* str.lstrip(chars) – Removes leading whitespace (or specified chars).
* str.rstrip(chars) – Removes trailing whitespace (or specified chars).
* str.replace(old, new, count) – Replaces occurrences of old with new.

**6. Splitting & Joining**

* str.split(sep, maxsplit) – Splits the string into a list using sep.
* str.rsplit(sep, maxsplit) – Splits from the right.
* str.splitlines(keepends) – Splits a string into a list of lines.
* str.partition(sep) – Splits the string into a tuple at the first occurrence of sep.
* str.rpartition(sep) – Splits from the right.
* str.join(iterable) – Joins elements of an iterable into a string.

**7. Encoding & Other Methods**

* str.encode(encoding, errors) – Encodes the string into bytes.
* str.expandtabs(tabsize) – Replaces tabs with spaces.
* str.casefold() – Converts to lowercase (stronger than lower()).
* str.format(\*args, \*\*kwargs) – Formats a string.
* str.format\_map(mapping) – Formats using a dictionary.
* str.maketrans(dict) – Creates a translation table.
* str.translate(table) – Translates the string using a table.

These methods allow efficient manipulation of strings in Python. 🚀 Let me know if you need explanations for any!