

Advanced String Operations

1. String Slicing (with Step):

- Strings can be sliced with a step value.

2. String Membership Operators:

- `in` → checks if a substring exists.
- `not in` → checks if substring does not exist.

3. String Comparison:

- Strings are compared **lexicographically** (like dictionary order).

4. String Join and Split:

- `join()` → joins list elements into a string.
- `split()` → splits string into list.

5. String Strip, Lstrip, Rstrip:

- Used to remove extra spaces or characters.

6. String isX Methods (Checking):

- `isalpha()` → checks only alphabets.
- `isdigit()` → checks only digits.
- `isalnum()` → checks alphabets + numbers.
- `isspace()` → checks only spaces.

7. Reversing a String

Key Points:

- Slicing with step allows skipping characters.
- Membership operators check existence.
- Comparison follows alphabetical order.
- join & split are useful for text processing.
- strip removes unwanted spaces.
- isX methods are for validation.
- Reverse string with slicing.