

String Basics

String:

- A **string** is a sequence of characters enclosed in quotes.
- Can be written using:
 - **Single quotes** → 'hello'
 - **Double quotes** → "hello"
 - **Triple quotes** → """hello""" or `"""hello"""` (used for multi-line strings).

String Indexing:

- In Python, each character in a string has a **position (index)**.
- Indexing starts from **0** for the first character.
- You can access characters using square brackets [].

String Slicing:

- You can extract a portion (substring) using `string[start:end]`.
- start index is **inclusive**, end index is **exclusive**.
- Syntax: `string[start:end:step]`

Strings are Immutable

- You **cannot change** a string after it is created.
- Example: You cannot replace "P" with "J" directly in "Python".
- You must create a new string instead.

String Concatenation:

- You can **join two strings** using +.

String Repetition:

- You can repeat a string using *.