CREATING AND MANIPULATING STRINGS, STRING METHODS AND FORMATTING

1. CREATING STRINGS

- A **string** is a sequence of characters — letters, numbers, or symbols — inside quotes.

Examples:

name = "Yenepoya"

greeting = 'Hello'

sentence = "I am learning Python!"

You can use **single** (') or **double** (") quotes — both work the same.

2. ACCESSING CHARACTERS IN A STRING

- Each character has an **index number** (starts from 0).

Example:

word = "Python"

print(word[0])

print(word[3])

print(word[-1])

3. STRING SLICING (GETTING PARTS)

- You can get a part (slice) of a string using:

Syntax: string[start:stop:step]

start = position where it begins   step = how much to jump each time

stop = stops **before** this position

Example:

text = "Programming"

print(text[0:6])

print(text[:6])

print(text[3:])

print(text[-3:])

4. STRING CONCATENATION (JOINING STRINGS)

- You can join two strings using +.

Example:

first = "Hello"

second = "World"

print(first + " " + second)

5. STRING REPETITION

- Repeat a string using *.

Example:

word = "Hi! "

print((word + " ") * 3)

6. COMMON STRING METHODS

- Methods are built-in functions you can use **with a dot** (**.**) after a string.

Method	Description	Example
upper()	Converts to uppercase	"hello".upper() -> "HELLO"
lower()	Converts to lowercase	"HELLO".lower() -> "hello"
title()	Capitalizes each word	"my name is abc".title() -> "My Name Is Abc"
strip()	Removes extra spaces	" hello ".strip() -> "hello"
replace(old, new)	Replaces part of text	"I like Java".replace("Java", "Python") -> "I like Python"
split()	Splits text into list	"a,b,c".split(",") -> ['a', 'b', 'c']
join()	Joins list into string	"-".join(['a','b','c']) -> "a-b-c"
find()	Finds position of text	"banana".find("na") -> 2

7. STRING FORMATTING (INSERTING VALUES INTO STRINGS)

You can insert variables into strings in different ways.

Method 1: Using +

name = "Abc"

print("Hello " + name)

Method 2: Using f-string (modern & best way)

name = "Abc"

age = 22

print(f"My name is {name} and I am {age} years old.")

Method 3: Using format()

name = "Abc"

age = 22

print("My name is {} and I am {} years old".format(name, age))