

Task - 8

date - 28/10/2025

① What is string & different ways to create string?

- - A string in python is a sequence of characters enclosed within single quotes (''), double quotes (" "), or triple quotes ("").
- single quotes → 'Hello'
- Double quotes → "Hello"
- Triple quotes → """Hello""" or """"Hello""""
- using str() function → str(123) → '123'

② string is mutable or immutable?

- strings are immutable in nature.

e.g. s = "Hello"

s[0] = 'M' # error - strings are immutable

③ Program to print string "I like python programming".

- msg = "I like python programming"
- print(msg)

④ difference between capitalize() & title()

→ capitalize()

converts only the first character of the string to uppercase

e.g. msg = "I like python"

msg.capitalize()

⇒ I like python

title()

converts first char. of each word to uppercase

e.g. msg = "I like python"

msg.title()

⇒ I Like Python

⑤ What are the different operations in string that explain a syntax and with their example?

→

① Concatenation - Joining two strings.

Syntax - `str1 + str2`

e.g. `str1 = "Hello"`

`str2 = "world"`

`c = str1 + str2`

`c`

⇒ Hello world

② Repetition - repeat string multiple times.

Syntax - `str * n`

e.g. `"Hi" * 3` ⇒ "HiHiHi"

③ Indexing ⇒ Access a character by position.

Syntax - `str[index]`

e.g. `"Python"[0]` ⇒ 'P'

④ Slicing → extract part of a string

Syntax - `str[start:end]`

⑤ length - find string length.

`len(str)`

⑥ membership → check if substring exist.

`'py' in str`

⑦ Iteration - loop through characters.

`for ch in str:`

⑧ Replace - Replace substring

`str.replace(old, new)`

⑨ Split - split string into list

`str.split()`

⑩ Join - Join list into string

`' '.join(list)`