

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() title()

converts only the first character of the string to uppercase

e.g. msg = "I like python"  
msg.capitalize()

⇒ I like python

converts first char. of each word to uppercase

e.g. msg = "I like python"  
msg.title()

⇒ I Like Python .

Q) 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)`