**Que 1 : Understanding how to access and manipulate strings.**

**Accessing Characters**

text = "Python"

print(text[0]) # P

print(text[-1]) # n

**Slicing Strings**

print(text[1:4]) # yth

print(text[::2]) # Pto

**String Length**

print(len(text)) # 6

**String Methods**

print(text.upper()) # PYTHON

print(" Hello ".strip()) # Hello

print("apple".replace("a", "A")) # Apple

**Looping Through String**

for ch in "Hi":

print(ch)

**String Join, Repeat**

print("Hi" + "There") # HiThere

print("Hi" \* 3) # HiHiHi

Que 2: Basic operations: concatenation, repetition, string methods (upper(), lower(), etc.).

1. **Concatenation** – Joining strings

**Example:**

A = “Hello”

b = "World"

print(a + " " + b) # Output: Hello World

2. **Repetition** – Repeat a string

**Example:**

text = "Hi"

print(text \* 3) # Output: HiHiHi

3. **String Methods**

**Example:**

upper()

print("hello".upper()) # HELLO

lower() – Converts to lowercase

print("HELLO".lower()) # hello

strip() – Removes spaces from both

print(" Hello ".strip()) # Hello

replace() – Replaces a part of the string

print("apple".replace("a", "A")) # Apple

count() – Counts occurrences

print("banana".count("a")) # 3

find() – Finds index of a substring

print("banana".find("na")) # 2

**Que 3 : String slicing.**

**Slicing** means extracting a part (substring) from a string using this format:

**Syntax:**

string[start : end : step]

* start = index to begin (inclusive)
* end = index to stop (exclusive)
* step = how many steps to jump (optional)

1. Basic slicing:

Example:

print(text[0:3]) # Pyt (from index 0 to 2)

2. Skip step:

Example:

print(text[::2]) # Pto (every 2nd letter)

3. Slice from start:

Example:

print(text[:4]) # Pyth

4. Slice till end:

Example:

print(text[2:]) # thon

5. Reverse string:

Example:

print(text[::-1]) # nohtyP

6. Negative Indexing:

Example:

print(text[-3:]) # hon (last 3 characters)