Strings In Python (part-2)

operations on strings

In Python, strings are sequences of characters and are very versatile. You can perform a wide range of operations on strings, including but not limited to:

1. Concatenation

You can concatenate (combine) two or more strings using the '+' operator:

In [ ]:
```
# Arithmatic opertion in string
a = 'Hello'
b = 'world'
print(a + b)

# if we want space
print(a + " " + b)
```

```
Helloworld
Hello world
```

In [ ]:
```
# how to print delhi 14 times
print("delhi"*14)
```

```
delhidelhidelhidelhidelhidelhidelhidelhidelhidelhidelhidelhidelhi
```

In [ ]:
```
print("*"*50)
```

```
**************************************************
```

2. Indexing and Slicing

You can access individual characters of a string using indexing, and you can extract substrings using slicing

In [ ]:
```
s = "Hello world"
```

In [ ]:
```
s[3] # it slice one word from the string
```

Out[ ]:
```
'l'
```

In [ ]:
```
s[4:9]
```

Out[ ]:
```
'o wor'
```

3. String Methods

Python provides many built-in string methods for common operations like converting to uppercase, lowercase, finding substrings, replacing, and more

Upper

In [ ]:
```
text = "Hello, World!"
uppercase_text = text.upper()  # Convert to uppercase
print(uppercase_text)
```

```
HELLO, WORLD!
```

Lower

In [ ]:
```
lowercase_text = text.lower()  # Convert to lowercase
print(lowercase_text)
```

```
hello, world!
```

find

In [ ]:
```
index = text.find("World")     # Find the index of a substring
print(index)
```

```
7
```

replace

In [ ]:
```
new_text = text.replace("Hello", "Hi")  # Replace a substring
print(new_text)
```

```
Hi, World!
```

4. String Formatting

You can format strings using f-strings or the str.format() method

In [ ]:
```
name = 'nitish'
gender = 'male'

'Hi my name is {} and I am a {}'.format(name,gender)
```

Out[ ]:
```
'Hi my name is nitish and I am a male'
```

3. String Splitting and Joining

You can split a string into a list of substrings using the split() method and join a list of strings into one string using the join() method

In [ ]:
```
'hi my name is KHAN '.split()
```

Out[ ]:
```
['hi', 'my', 'name', 'is', 'KHAN']
```

In [ ]:
```
" ".join(['hi', 'my', 'name', 'is', 'KHAN'])
```

Out[ ]:
```
'hi my name is KHAN'
```

4. String Length

You can find the length of a string using the len() function

In [ ]:
```
text = "Hello, World!"
length = len(text)  # Returns the length of the string (13 in this case)
print(length)
```

```
13
```

5. Strip

In [ ]:
```
'hey                              '.strip() # it drop the Unwanted space prenet
```

Out[ ]:
```
'hey'
```

In [ ]:
```

```