Inbuilt - string Assignment

March 10, 2024

[1]:
```
# 1. What is the purpose of the len() function in Python, and how can it be␣
 ↪used with strings?

# Ans>> The len() function in Python is used to determine the length of a␣
 ↪sequence or collection, such as a (string, list, tuple, dictionary,) etc
# When used with strings specifically, len() returns the number of characters␣
 ↪in the string.
my_string = "Hello, World!"
length = len(my_string)
print("Length of the string:", length)
```

```
Length of the string: 13
```

[2]:
```
# 2. How can you concatenate two or more strings in Python, and can you provide␣
 ↪an example of string concatenation?
# Ans>> In Python, you can concatenate (combine) two or more strings using the␣
 ↪+ operator or by using the str.join() method.
string1 = "Hello"
string2 = "World"
concatenated_string = string1 + ", " + string2 + "!"
print(concatenated_string)
```

```
Hello, World!
```

[4]:
```
# 3. What is string slicing in Python, and how can you extract a portion of a␣
 ↪string using this method?

# Ans>> The syntax for string slicing is string[start:end:step]
# String slicing in Python refers to extracting a portion of a string by␣
 ↪specifying a range of indices.
my_string = "Hello, World!"
substring = my_string[7:]
print(substring)
substring = my_string[:5]
print(substring)
substring = my_string[7:12]
print(substring)
```

```
substring = my_string[::2]
print(substring)
```

```
World!
Hello
World
Hlo ol!
```

[5]:
```
# 4. How can you change the case of a string in Python, and can you provide␣
 ↪examples of both making a string  all uppercase and all lowercase?
# Ans>>
# In Python, you can change the case of a string using the upper() and lower()␣
 ↪methods.
my_string = "Hello, World!"
uppercase_string = my_string.upper()
print(uppercase_string)
lowercase_string = my_string.lower()
print(lowercase_string)
```

```
HELLO, WORLD!
hello, world!
```

[6]:
```
# 5. What does the split() method do in Python, and how can you split a string␣
 ↪using a specific delimiter?
# Ans>>
# In Python, the split() method is used to split a string into a list of␣
 ↪substrings based on a specified delimiter.
# By default, the delimiter is a space character, but you can specify a␣
 ↪different delimiter if needed.

my_string = "apple,banana,orange,grape"
# Split the string using a comma as the delimiter
fruits_list = my_string.split(",")
print(fruits_list)
```

```
['apple', 'banana', 'orange', 'grape']
```

[ ]:
```

```