

Python String Methods Quick Reference

Bruce Huang

Understanding Strings in Python

Strings are sequences of characters enclosed within single, double, or triple quotes. String methods are built-in functions in Python that allow us to easily manipulate and validate strings.

1. len() Function

Usage: To find the length of a string.

Syntax: len(string)

Example:

```
my_string = "Hello World!"
string_length = len(my_string)
print(string_length) # Output: 12
```

2. String Manipulation Methods

a) str.upper()

Usage: Converts all characters in string to uppercase.

Syntax: string.upper()

Example:

```
my_string = "hello"
upper_string = my_string.upper()
print(upper_string) # Output: HELLO
```

b) str.lower()

Usage: Converts all characters in string to lowercase.

Syntax: string.lower()

Example:

```
my_string = "WORLD"
lower_string = my_string.lower()
print(lower_string) # Output: world
```

3. String Validation Methods

a) `str.isdigit()`

Usage: Returns `True` if all characters in the text are digits.

Syntax: `string.isdigit()`

Example:

```
my_string = "12345"
result = my_string.isdigit()
print(result) # Output: True
```

b) `str.isalpha()`

Usage: Returns `True` if all characters in the text are alphabets.

Syntax: `string.isalpha()`

Example:

```
my_string = "hello"
result = my_string.isalpha()
print(result) # Output: True
```

4. Finding Substrings

a) `str.startswith()`

Usage: Checks if the string starts with a certain substring.

Syntax: `string.startswith(substring)`

Example:

```
my_string = "Hello World"
result = my_string.startswith('Hello')
print(result) # Output: True
```

b) `str.endswith()`

Usage: Checks if the string ends with a certain substring.

Syntax: `string.endswith(substring)`

Example:

```
my_string = "Hello World"
result = my_string.endswith('World')
print(result) # Output: True
```

Tips

- You can combine different string methods to perform more complex operations.