

Programming and Problem Solving through Python Language

O Level / A Level

Chapter - 6 : Functions

String Functions

A string is a sequence of characters enclosed in quotation marks.

1. Count () Function

This method returns the number of times a specified value appears in the string.

Syntax `string.count(value, start, end)`

Value(Required) - A String -String whose count is to be found.

Start(Optional) - An Integer -The position to start the search.(Default is 0.)

End(Optional) - An Integer - The position to end the search.(Default is the end of string.)

Example

```
txt = "I love apples, apple are my favorite apple"
x = txt.count("apple", 10, 24)
print(x)
```

Output 1

2. find () Function

This method finds the first occurrence of the specified value.

It returns -1 if the value is not found

Syntax `string.find(value, start, end)`

Value(Required) - A String -String whose count is to be found.

Start(Optional) - An Integer -The position to start the search.(Default is 0.)

End(Optional) - An Integer - The position to end the search.(Default is the end of string.)

Example

```
txt = "I love apples, apple are my favorite apple"
x = txt.find("apple", 10, 24)
print(x)
```

Output 15

3. rfind () Function

This method finds the last occurrence of the specified value.
It returns -1 if the value is not found

Syntax `string.rfind(value, start, end)`

Value(Required) - A String -String whose count is to be found.

Start(Optional) - An Integer -The position to start the search.(Default is 0.)

End(Optional) - An Integer - The position to end the search.(Default is the end of string.)

Example

```
txt = "I love apples, apple are my favorite apple"  
x = txt.rfind("apple", 10, 24)  
print(x)
```

Output 15

4. capitalize () Function

This method changes the first character of the string to upper case.

Syntax `string.capitalize()`

Example

```
txt = "i love apples, apple are my favorite apple"  
x = txt.capitalize( )  
print(x)
```

```
txt = "99 love apples, apple are my favorite apple"  
x = txt.capitalize( )  
print(x)
```

Output I love apples, apple are my favorite apple
99 love apples, apple are my favorite apple

5. title() Function

- This method changes the first character of every word of the string to upper case.
- If the word contains a number or a symbol, the first letter after that will be converted to upper case.

Syntax `string.title()`

Example

```
txt = "I love apples, apple are my favorite apple"  
x = txt.title ( )  
print(x)
```

```
txt = "hello 22nd b2b2b2 and 3g3g3g"  
x = txt.title ()  
print(x)
```

Output I Love Apples, Apple Are My Favorite Apple
Hello 22Nd B2B2B2 And 3G3G3G

6. lower() Function

This method changes all characters of the string to lower case.

Syntax string.lower()

Example

```
txt = "I love apples, apple are my favorite apple"  
x = txt.lower()  
print(x)
```

Output i love apples, apple are my favorite apple

7. upper() Function

This method changes all characters of the string to upper case.

Syntax string.upper()

Example

```
txt = "I love apples, apple are my favorite apple"  
x = txt.upper()  
print(x)
```

Output I LOVE APPLES, APPLE ARE MY FAVORITE APPLE

8. swapcase() Function

This makes the lower case letters to upper case and the upper case letters to lower case.

Syntax string.swap()

Example

```
txt = "I Love Apples."  
x = txt.swapcase()  
print(x)
```

Output i LOVE aPPLES.

9. islower() Function

This method returns True if all the characters are in lower case, otherwise False.

Syntax `string.islower()`

Example

```
a = "Hello world!"
b = "hello 123"
c = "mynameisPeter"
print(a.islower())
print(b.islower())
print(c.islower())
```

Output False
 True
 False

10. isupper() Function

This method returns True if all the characters are in lower case, otherwise False.

Syntax `string.isupper()`

Example

```
a = "Hello world!"
b = "hello 123"
c = "mynameisPeter"
print(a.isupper ())
print(b.isupper ())
print(c.isupper ())
```

Output False
 False
 False

11. istitle() Function

This method checks the string and returns True if the string follows the rules of a title.

Syntax `string.istitle()`

Example

```
a = "Hello World!"
b = "hello 123"
c = "mynameisPeter"
print(a.istitle())
print(b.istitle())
print(c.istitle())
```

Output True
 False
 False