Python Strings

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Strings

Strings in python are surrounded by either single quotation marks, or double quotation marks.

`'hello'` is the same as `"hello"`.

You can display a string literal with the `print()` function:

Example

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```
print("Hello")
print('Hello')
```

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Quotes Inside Quotes

You can use quotes inside a string, as long as they don't match the quotes surrounding the string:

Example

```
print("It's alright")
print("He is called 'Johnny'")
print('He is called "Johnny"')
```

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Assign String to a Variable

Assigning a string to a variable is done with the variable name followed by an equal sign and the string:

Example

```
a = "Hello"
print(a)
```

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Multiline Strings

You can use three double quotes:

```
a = """Lorem ipsum dolor sit amet,
consectetur adipiscing elit,
sed do eiusmod tempor incididunt
ut labore et dolore magna aliqua."""
print(a)
```

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Or three single quotes:

Example

```
a = '''Lorem ipsum dolor sit amet,
consectetur adipiscing elit,
sed do eiusmod tempor incididunt
ut labore et dolore magna aliqua.'''
print(a)
```

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Note: in the result, the line breaks are inserted at the same position as in the code.

Strings are Arrays

Like many other popular programming languages, strings in Python are arrays of bytes representing unicode characters.

However, Python does not have a character data type, a single character is simply a string with a length of 1.

Square brackets can be used to access elements of the string.

Example

Get the character at position 1 (remember that the first character has the position 0):

```
a = "Hello, World!"
print(a[1])
```

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Looping Through a String

Since strings are arrays, we can loop through the characters in a string, with a `for` loop.

Example

Loop through the letters in the word "banana":

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Learn more about For Loops in our Python For Loops chapter.

String Length

To get the length of a string, use the `len()` function.

Example

The `len()` function returns the length of a string:

```
a = "Hello, World!"
print(len(a))
```

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Check String

To check if a certain phrase or character is present in a string, we can use the keyword `in`.

Example

Check if "free" is present in the following text:

```
txt = "The best things in life are free!"
print("free" in txt)
```

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Use it in an `if` statement:

Example

Print only if "free" is present:

```
txt = "The best things in life are free!"
if "free" in txt:
  print("Yes, 'free' is present.")
```

Try it Yourself »

Learn more about If statements in our Python If...Else chapter.

Check if NOT

To check if a certain phrase or character is NOT present in a string, we can use the keyword `not in`.

Example

Check if "expensive" is NOT present in the following text:

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Use it in an `if` statement:

Example

print only if "expensive" is NOT present:

```
txt = "The best things in life are free!"
if "expensive" not in txt:
  print("No, 'expensive' is NOT present.")
```

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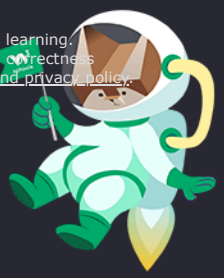
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