## String Literals

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

'hello' is the same as "hello".

Strings can be output to screen using the print function. For example: print("hello").

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])

### Example

Substring. Get the characters from position 2 to position 5 (not included):

b = "Hello, World!"

print(b[2:5])

### Example

The strip() method removes any whitespace from the beginning or the end:

a = " Hello, World! "

print(a.strip()) # returns "Hello, World!"

### Example

The len() method returns the length of a string:

a = "Hello, World!"

print(len(a))

### Example

The lower() method returns the string in lower case:

a = "Hello, World!"

print(a.lower())

### Example

The upper() method returns the string in upper case:

a = "Hello, World!"

print(a.upper())

### Example

The replace() method replaces a string with another string:

a = "Hello, World!"

print(a.replace("H", "J"))

### Example

The split() method splits the string into substrings if it finds instances of the separator:

a = "Hello, World!"

print(a.split(",")) # returns ['Hello', ' World!']

## Command-line String Input

Python allows for command line input.

That means we are able to ask the user for input.

The following example asks for the user's name, then, by using the input() method, the program prints the name to the screen:

### Example

demo\_string\_input.py

print("Enter your name:")

x = input()

print("Hello, ", x)

Save this file as demo\_string\_input.py, and load it through the command line:

C:\Users\*Your Name*>python demo\_string\_input.py

Our program will prompt the user for a string:

Enter your name:

The user now enters a name:

Linus

Then, the program prints it to screen with a little message:

Hello, Linus

## Test Yourself With Exercises

## Exercise:

Use the len method to print the length of the string.

x = "Hello World"

print(\_\_\_\_\_\_)