

### String Syntax

<code>s1 = "this is"</code>	Strings can be declared with <code>"..."</code>
<code>s2 = 'a string'</code>	... or <code>'...'</code>
<code>s1 + s2</code>	Returns <code>s1</code> concatenated with <code>s2</code> ('this is a string')
<code>s1 * 3</code>	Returns <code>s1</code> concatenated with itself 3 times (this is this is this)
<code>s1[3]</code>	Returns 4th element of <code>s1</code> ( <code>s</code> )
<code>s1[0:3]</code>	Returns 1st to 3rd element of <code>s1</code> ( <code>thi</code> )
<code>s1[0:7:2]</code>	Returns 1st to 7th element of <code>s1</code> skipping one at a time ( <code>ti s</code> )

### String Methods

<code>s = "stRing"</code>	
<code>s.capitalize()</code>	Returns capitalized version of <code>s</code> (String)
<code>s.upper()</code>	Returns upper case version of <code>s</code> (STRING)
<code>s.lower()</code>	Returns lower case version of <code>s</code> (string)
<code>s.title()</code>	Returns <code>s</code> with first letter of each word capitalized (String)
<code>s.swapcase()</code>	Returns the case swapped version of <code>s</code> (STrING)
<code>s.replace('tR', 'l')</code>	Returns a copy of <code>s</code> with all <code>'tR'</code> replaced by <code>'l'</code> (sling)
<code>s.startswith('R')</code>	Returns true if <code>s</code> starts with <code>'R'</code> and false otherwise (False)
<code>s.endswith('ing')</code>	Returns true if <code>s</code> ends with <code>'ing'</code> and false otherwise (True)
<code>s.split('R')</code>	Splits the string into a list of strings. In this case, <code>"R"</code> is the splitting parameter. ( <code>["sr", "ing"]</code> )
<code>s.strip()</code>	Removes spaces in the beginning and in the end of the string ("stRing")
<code>s.strip("g")</code>	Removes <code>"g"</code> in the beginning and in the end of the string ("stRin")
<code>''.join([s, 's are cool'])</code>	Returns the string <code>" "</code> concatenated with <code>s</code> and <code>'s are cool'</code> ('stRings are cool')

### String Formatting - Printf Arguments

<code>d</code>	Int
<code>f</code>	Float
<code>s</code>	String
<code>10d</code>	Reserves 10 spaces to the int
<code>^10d</code>	Reserves 10 spaces to the int and centralize the content
<code>&lt;10d</code>	Reserves 10 spaces to the int and align the content left
<code>&gt;10d</code>	Reserves 10 spaces to the int and align the content right
<code>*^10d</code>	Reserves 10 spaces to the int , centralize the content and fill the empty spaces with <code>*</code>
<code>0&gt;10d</code>	Reserves 10 spaces to the int , align the content right and fill the empty spaces with <code>0s</code>
<code>0&gt;.2f</code>	Format float with 2 decimal places
<code>0&gt;10.2f</code>	Reserves 10 spaces to the float and format with 2 decimal places

### String - The format() Method

```
a = 10
b = 3.5555
print("The value of a is {} and the value of b is {:.2f}".format(a, b))
```

Instead of using a formatted string (only available on Python 3.6 and up) you can also use the format method inserting `.format()` at the end of the string.

### String Formatting - Example

```
a = 10.12571
print(f"The value of a is {a:.2f}")
# This code prints "The value of a is 10.13"
# Use f before starting a string to make it a formatted string
# Use {a} in a formatted string to interpolate the variable a in the string
# Use {:.2f} after the variable name to format it as a float with 2 decimal places
```

