

## Strings

- ◎ An ordered collection of characters
- ◎ Built in data structure in which individual element can be accessed using its position i.e. index value
- ◎ immutable data structure
- ◎ Indexing ,slicing, + , \* , in, len(), count(), max() and min() works like list, on strings also

### Creating string

- ◎ Using assignment operator
  - s1 = 'abc'
  - s2 = s1 (creates shallow copy)
- ◎ Using function / method
  - str()
- ◎ Using input() function
- ◎ Using " " to create blank string

### String method / function

Method	Description	
isalnum()	Returns True, if string contains alphabet or digit only	>>>str="Beta22" >>>str.isalnum() True
isalpha()	Returns True, if string contains alphabet only	>>>str="Collection" >>>str.isalpha() True >>>str="Collection18" False

isdigit()	Returns True, if string contains digit only	>>>str="9923" >>>str.isdigit() True >>>str="9934B" >>>str.isdigit()
islower()	Returns True, if string contains lower case alphabet only	>>>str="decathlon" >>> str.islower() True
isupper()	Returns True, if string contains uppercase alphabet or only	>>>str="DECATHLON" >>> str.upper() True
lower()	Returns string having all lowercase alphabets	>>> str="PLeASE REMOVE the COVER before OPENing" >>> str.lower() 'please remove the cover before opening'
upper()	Returns string having all uppercase alphabets	>>> str="This is #YEAR 2019" >>> str.upper() 'THIS IS #YEAR 2019'
capitalize()	Returns string having first alphabet capitalized of the string	>>> str="this is a Programming Language" >>> str.capitalize() 'This is a programming language'
title()	Returns string in which first letter of every string is uppercase	>>> str="this is Great News" >>> str.title() 'This Is Great News'
ltitle()	Returns True, if the string is titlecased, False otherwise.	>>>str="Return the Text book"

		<pre>&gt;&gt;&gt;str.istitle() False  &gt;&gt;&gt;"Good Work Is Exemplary".istitle() True</pre>
swapcase()	Returns string after swapping uppercase alphabet to lowercase and lowercase alphabet to uppercase	<pre>&gt;&gt;&gt; str="GREAT this is Awesome!!" &gt;&gt;&gt; str.swapcase() 'great THIS IS aWESOME!!'</pre>
find()	Accepts a substring, and returns the lowest index where the substring is found, returns -1 otherwise	<pre>&gt;&gt;&gt; str="Casablanca" &gt;&gt;&gt; str.find("sabl") 2</pre>
replace()	Accepts two substrings and returns a string in which all occurrences of first substring are replaced by second substring.	<pre>&gt;&gt;&gt; str="Hello Friends" &gt;&gt;&gt; str.replace("Hello", "Good") 'Good Friends'</pre>
index()	Accepts three arguments – a string and two integers (start, stop), both integer are optional. Returns an integer (index) of the substring in the string if it is found, otherwise raise an exception	<pre>&gt;&gt;&gt; str="Casablanca" &gt;&gt;&gt; str.index("sabl") 2</pre>
split()	Accepts two arguments a splitCharacter & an integer (maxSplit) and returns a list of strings after breaking the string at specified character i.e. splitCharacter and integer specifies number of splits to be made.	<pre>&gt;&gt;&gt; str="we, are, good, people" &gt;&gt;&gt; str.split(sep=", ") ['we', ' are', ' good', ' people']</pre>

Both arguments are optional.  
Default value for splitCharacters in  
blankspace.

Note – import string module