

## String Methods

- ① `upper()` → Convert the string to uppercase.
- ② `lower()` → Convert the string to lowercase.
- ③ `title()` → Capitalize each word in a string.
- ④ `capitalize()` → 1<sup>st</sup> letter of the 1<sup>st</sup> word is capitalized.
- ⑤ `swapcase()` → Convert Upper to lower & Lower to Upper.

Ex

`s1 = "Tom vs Jerry"`

`s1.upper()` → TOM VS JERRY.

`s1.lower()` → tom vs jerry.

`s1.title()` → Tom Vs Jerry.

`s1.capitalize()` → Tom vs Jerry.

`s1.swapcase()` → tOM vS JERRY.

⑥ `replace()` → Replace the old value with the new value.

- If the 1<sup>st</sup> argument doesn't match any substring of the original string, then it will return the original string.

⑦ `starts with()` → True → if the string starts with spec. prefix  
else False

⑧ `ends with()` → True → if the string ends with spec. suffix  
else False

⑨ `lstrip()` → leading whitespace removed.

⑩ `rstrip()` → trailing whitespace removed.

⑪ `strip()` → leading + trailing w.s rem.

ex:   
`SI = " He is a boy "` // He is a cricketer.

`print(SI.replace('boy', 'cricketer'))` // true

`print(SI.startswith('he'))` // true

`print(SI.endswith('the'))` // false

`print(SI.lstrip())` // He is a boy

`print(SI.rstrip())` // He is a boy

`print(SI.strip())` // He is a boy.

12) `isupper()` → True if string are in upper else False

13) `islower()` → True if string are in lower else False.

Note: Both `isupper()` & `islower()`

will return True for whitespaces, digits, spl. char & symbols but the string must contain atleast one upper/lower case.

ex:  $s1 = "hello"$ ,  $s2 = "IRONMAN"$

$s3 = "5ITG9"$ ,  $s4 = "Y-L*5"$

$s5 = "KIM:9"$ ,  $s6 = "12^c"$

### `isupper()`

$s1 = \text{False}$ .

$s2 = \text{True}$ .

$s3 = \text{True}$ .

$s4 = \text{True}$ .

$s5 = \text{True}$ .

$s6 = \text{True}$ .

### `islower()`

$s1 = \text{True}$ .

$s2 = \text{False}$ .

$s3 = \text{True}$ .

$s4 = \text{True}$ .

$s5 = \text{True}$ .

$s6 = \text{True}$ .

14) `isalnum()` → True → combination of nos and/or alph. (no space, spl char).

15) `isalpha()` → True → if all char. are alphabets (no space, digits, spl char)

16) `isspace()` → True → if all char. are space.

ex:  $s1 = "Harry potter"$

$s2 = "BOY23"$

$s3 = "catherine"$

$s4 = "Age: 8:10"$

$s5 = "Age@7219L"$

Spl. char:

[@, -, !, #, \$,

, /, ^, &, \*,

(, ), <, >, ?, \,

, ., , , ~, : ]

isalpha()

$s1 = \text{False}$

$s2 = \text{False}$

$s3 = \text{True}$

$s4 = \text{False}$

$s5 = \text{False}$

isalnum().

$s1 = \text{False}$ .

$s2 = \text{True}$ .

$s3 = \text{True}$ .

$s4 = \text{False}$ .

$s5 = \text{True}$ .

ex:  $s1 = "Harry potter"$

$s2 = "BOY23"$

$s3 = "catherine"$

$s4 = "9"$

isspace().

$s1 \rightarrow \text{False}$ .

$s2 \rightarrow \text{True}$ .

$s3 \rightarrow \text{False}$ .

$s4 \rightarrow \text{False}$ .

17) `isdigit()` → True → only nos.  
(no spaces, alpha, apl char, symbols)

18) `isnumeric()` → True → numeric  
i.e., Int, subscript, superscript,  
fractions, numerals, (no space)

19) `isdecimal()` → True → decimal nos.  
(no space, subscript, superscript,  
currency numerators, fractions,  
roman numerals).

ex.:  $s1 = "123.456"$ ,  $s2 = "5943"$   
 $s3 = "Kim-19"$ ,  $s4 = "wc 2020"$   
 $s5 = "20% ^@23"$ ,  $s6 = "Hello"$ .

<code>isdigit()</code>	<code>isnumeric()</code>	<code>isdecimal()</code>
$s1 \rightarrow$ False	$s1 = \text{False}$	$s1 = \text{False}$
$s2 = \text{True}$	$s2 = \text{True}$	$s2 = \text{True}$
$s3 = \text{False}$	$s3 = \text{False}$	$s3 = \text{False}$
$s4 = \text{False}$	$s4 = \text{False}$	$s4 = \text{False}$
$s5 = \text{False}$	$s5 = \text{False}$	$s5 = \text{False}$
$s6 = \text{False}$	$s6 = \text{False}$	$s6 = \text{False}$

20) **Find** → Return the position of string: 3 Arguments.

Find( sub, start, end):

→ start, end are optional. If

absent, then search starts from index 0.

Index = 0. Otherwise return -1.

→ If substring is not found, pt returns -1.

pt returns the pos. of str.

21) **Index** → Return the pos. of str.

3 Arguments. Index( sub, start, end).

→ start, end are optional. If absent,

then search starts from index 0.

→ If substring is not found, pt

raises valueError exception.

ex: s = "we lco m e in t o"

P Y + h o n

9 10

is Index().

is find()

s. find('yth') → 12.

s. find('to') → 8.

s. find('o') → 4.

s. find('me', 3, 10) → 5.

s. find('neon') → -1.

s. find('e t', 5, 15) → 6.

s. index('yth') → 12.

s. index('to') → 8.

s. index('o') → 4.

s. index('me', 3, 10) → 5.

s. index('e t', 5, 15) → 6.

s. index('neon') → value error.

22) count() → Returns the no. of occu. of the string.

### 3. Arguments

count ( sub, start, end ).

- Start, End are optional. If absent, the count starts from Index 0.

If sub-string not found, it returns 0.

ex:

s = "Messi is light years

ahead of Ronaldo".

print ( s. count('i') ) // 3

s. count ('ea', 20) // 1

s. count ('s', 7, 20) // 2

s. count (' ') // 6

s. count ('goal') // 0

23. split(): Returns the list of wrds in string . Using sep as delimiter string.

## 2. Arguments.

split ( sep, maxsplit ).

- sep is optional. If absent, splitting is done based on single empty space.

- maxsplit is optional. specifies the no. of times to split.

ex .. s = " python is better

than Java"

s. split() → [ 'python', 'is', 'better',  
'than', 'Java' ].

s. split ('a') → [ 'python', 'is', 'better',  
'th', 'n', 'J', 'v', ''] .

s. split ('t', 2) → [ 'py', 'hon', 'is',  
be', 'ter', 'than', 'Java' ].

X ————— X