

String Functions

Hands-on Guide

edureka!

edureka!

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String Functions

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Most Commonly Used String Functions

`capitalize()`: Capitalizes first letter of string.

```
>>> s = "edureka"
>>> s.capitalize() ← capitalize()
'Eduureka'
Version 3.4.1
```

`count(str, beg= 0,end=len(string))`: Counts how many times `str` occurs in string or in a substring of string if starting index `beg` and ending index `end` are given.

```
>>> s = "edureka"
>>> s.count("re")
1
>>> s.count("re",0,len(s)) ← count(str, beg= 0,end=len(string))
1
Version 3.4.1
```

`encode(encoding='UTF-8',errors='strict')`: Returns encoded string version of string; on error, default is to raise a `ValueError` unless `errors` is given with 'ignore' or 'replace'.

`decode(encoding='UTF-8',errors='strict')`: Decodes the string using the codec registered for Encoding. Encoding defaults to the default string encoding.

```
>>> s = "edureka"
>>> s = s.encode('UTF-8','strict') ← encode(encoding='U
TF-8',errors='strict')
>>> s
b'edureka'
>>> s = s.decode('UTF-8','strict') ← decode(encoding='U
TF-8',errors='strict')
>>> s
'edureka'
Version 3.4.1
```

`index(str, beg=0, end=len(string))`: Same as `find()`, but raises an exception if `str` not found.

```
>>> s = "edureka"
>>> s.index("re")
3
>>> s.index("re",0,len(s)) ← index(str, beg=0, end=len(string))
3
Version 3.4.1
```

`max(str)`: Returns the max alphabetical character from the string `str`.

```
>>> s = "edureka"
>>> max(s) ← max(str)
'u'
```

Version 3.4.1

`min(str)`: Returns the min alphabetical character from the string `str`.

```
>>> s = "edureka"
>>> min(s) ← min(str)
'a'
```

Version 3.4.1

`replace(old, new [, max])`: Replaces all occurrences of `old` in string with `new` or at most `max`

`orfind(str, beg=0, end=len(string))`: Same as `find()`, but search backwards in string.

```
>>> s = "edureka"
>>> s.replace("e", "E")
'EdurEka'
>>> s.replace("e", "E", 1) ← replace(old, new [, max]):
'Edureka'
```

Version 3.4.1

`rfind(str, beg=0, end=len(string))`: Same as `find()`, but search backwards in string.

```
>>> s = "edureka"
>>> s.rfind("ka")
5
>>> s.rfind("ka", 0, len(s)) ← rfind(str, beg=0, end=len(string))
5
```

Version 3.4.1

`rindex(str, beg=0, end=len(string))`: Same as `index()`, but search backwards in string.

```
>>> s = "edureka"
>>> s.rindex("re")
3
>>> s.rindex("re", 0, len(s)) ← rindex( str, beg=0, end=len(string))
3
```

Version 3.4.1

`rstrip()`: Removes all trailing whitespace of string.

```
>>> s = "edureka "
>>> s.rstrip() ← rstrip()
'edureka'
```

Version 3.4.1

`split(str="", num=string.count(str))`: Splits string according to delimiter `str` (space if not provided) and returns list of substrings; split into at most `num` substrings if given.

```
>>> s = "edureka"
>>> s.split("re", s.count("re")) ← split(str="", num=string.count(str))
['edu', 'ka']
>>> s.split("re")
['edu', 'ka']
```

Version 3.4.1

`upper()`: Converts lowercase letters in string to uppercase.

```
>>> s = "edureka"
>>> s.upper() ← upper()
'EDUREKA'
```

Version 3.4.1

`lstrip()`: Removes all leading whitespace in string.

```
>>> s = "   edureka"
>>> s.lstrip() ← lstrip()
'edureka'
```

Version 3.4.1

`strip([chars])`: Performs both `lstrip()` and `rstrip()` on string.

```
>>> s = "   edureka   "
>>> s.strip() ← strip([chars])
'edureka'
```

Version 3.4.1

Extensive List of String Functions

Python includes the following Built-in Methods to manipulate Strings:

S.No.	Methods	Description
1	<u>capitalize()</u>	Capitalizes first letter of string.
2	<u>center(width, fillchar)</u>	Returns a space-padded string with the original string centred to a total of width columns.
3	<u>count(str, beg=0, end=len(string))</u>	Counts how many times str occurs in string or in a substring of string if starting index beg and ending index end are given.
4	<u>decode(encoding='UTF-8', errors='strict')</u>	Decodes the string using the codec registered for encoding. Encoding defaults to the default string encoding.
5	<u>encode(encoding='UTF-8', errors='strict')</u>	Returns encoded string version of string; on error, default is to raise a Value Error unless errors is given with 'ignore' or 'replace'.
6	<u>endswith(suffix, beg=0, end=len(string))</u>	Determines if string or a substring of string (if starting index beg and ending index end are given) ends with suffix; returns true if so and false otherwise.
7	<u>expandtabs(tabsize=8)</u>	Expands tabs in string to multiple spaces; defaults to 8 spaces per tab if tab size not provided.
8	<u>find(str, beg=0, end=len(string))</u>	Determine if str occurs in string or in a substring of string if starting index beg and ending index end are given returns index if found and -1 otherwise.
9	<u>index(str, beg=0, end=len(string))</u>	Same as find(), but raises an exception if str not found.

10	<u>isalnum()</u>	Returns true if string has at least 1 character and all characters are alphanumeric and false otherwise.
11	<u>isalpha()</u>	Returns true if string has at least 1 character and all characters are alphabetic and false otherwise.
12	<u>isdigit()</u>	Returns true if string contains only digits and false otherwise.
13	<u>islower()</u>	Returns true if string has at least 1 cased character and all cased characters are in lowercase and false otherwise.
14	<u>isnumeric()</u>	Returns true if a Unicode string contains only numeric characters and false otherwise.
15	<u>isspace()</u>	Returns true if string contains only whitespace characters and false otherwise.
16	<u>istitle()</u>	Returns true if string is properly "titlecased" and false otherwise.
17	<u>isupper()</u>	Returns true if string has at least one cased character and all cased characters are in uppercase and false otherwise.
18	<u>join(seq)</u>	Merges (concatenates) the string representations of elements in sequence seq into a string, with separator string.
19	<u>len(string)</u>	Returns the length of the string.
20	<u>ljust(width[, fillchar])</u>	Returns a space-padded string with the original string left-justified to a total of width columns.
21	<u>lower()</u>	Converts all uppercase letters in string to lowercase.
22	<u>lstrip()</u>	Removes all leading whitespace in string.

23	<u>maketrans()</u>	Returns a translation table to be used in translate function.
24	<u>max(str)</u>	Returns the max alphabetical character from the string str.
25	<u>min(str)</u>	Returns the min alphabetical character from the string str.
26	<u>replace(old, new [, max])</u>	Replaces all occurrences of old in string with new or at most max occurrences if max given.
27	<u>rfind(str, beg=0,end=len(string))</u>	Same as find(), but search backwards in string.
28	<u>rindex(str, beg=0, end=len(string))</u>	Same as index(), but search backwards in string.
29	<u>rjust(width,[, fillchar])</u>	Returns a space-padded string with the original string right-justified to a total of width columns.
30	<u>rstrip()</u>	Removes all trailing whitespace of string.
31	<u>split(str="", num=string.count(str))</u>	Splits string according to delimiter str (space if not provided) and returns list of substrings; split into at most num substrings if given.
32	<u>splitlines(num=string.count('\n'))</u>	Splits string at all (or num) NEWLINEs and returns a list of each line with NEWLINEs removed.
33	<u>startswith(str, beg=0,end=len(string))</u>	Determines if string or a substring of string (if starting index beg and ending index end are given) starts with substring str; returns true if so and false otherwise.
34	<u>strip([chars])</u>	Performs both lstrip() and rstrip() on string.
35	<u>swapcase()</u>	Inverts case for all letters in string.

36	<u>title()</u>	Returns "titlecased" version of string, that is, all words begin with uppercase and the rest are lowercase.
37	<u>translate(table, deletechars="")</u>	Translates string according to translation table str(256 chars), removing those in the del string.
38	<u>upper()</u>	Converts lowercase letters in string to uppercase.
39	<u>zfill (width)</u>	Returns original string left padded with zeros to a total of width characters; intended for numbers, zfill() retains any sign given (less one zero).
40	<u>isdecimal()</u>	Returns true if a Unicode string contains only decimal characters and false otherwise.

Source- http://www.tutorialspoint.com/python/python_strings.htm