

String Operations



MARCH 14TH 2014

Python has lots of string operations...



- You can find a bunch of these in Section 5.6.1. “String Methods” of the Python documentation (v. 2.7.2).
- These are in addition to the operations we studied that are common to lists *and* strings.
 - indexing, slicing
 - membership testing (`in` and `not in`) and concatenation (`+`).
 - `index`, `count`

String operations



- Here is a categorization (of some of these methods) that might help you navigate the long list of available string operations:
 - **Boolean methods:** isalpha, isalnum, isdigit, islower, isupper, isspace , startswith.
 - **Reformatting methods:** lower, upper, swapcase, capitalize, center, strip, lstrip, rstrip, ljust, rjust.
 - **Split methods:** split, lsplit, rsplit, splitlines.
 - **Join methods:** join.
 - **Replace methods:** replace

Examples: boolean methods



```
>>> "hello".isalpha()
True
>>> "hello".isalnum()
True
>>> "1234".isdigit()
True
>>> "39.78".isalnum()
False
>>> "hello?".islower()
True
>>> "Hello?".islower()
False
>>> "hello?".startswith("he")
True
>>> "hello?".startswith("He")
False
```

Examples: Reformatting methods



```
>>> "Hello, how are you?".lower()
'hello, how are you?'
>>> "Hello, how are you?".swapcase()
'hELLO, HOW ARE YOU?'
>>> "jack".capitalize()
'Jack'
>>> " this string has spaces.. ".strip()
'this string has spaces..'
>>> " this string has spaces.. ".lstrip()
'this string has spaces..'
>>> " this string has spaces.. ".rstrip()
'this string has spaces..'
>>> "test".center(20)
'      test      '
>>> "hello??" .rjust(20)
'          hello??'
```

Split and Join



```
>>> "hello, how are you?".split()
['hello,', 'how', 'are', 'you?']
>>> "Other, characters, can, be, used,,to,split?".split(",")
['Other', ' characters', ' can', ' be', ' used', '', 'to',
'split?']
>>> '''This string
... spans a
... few lines'''.splitlines()
['This string', 'spans a ', 'few lines']
>>> " ".join(["hello", "are", "you", "ok?"])
'hello are you ok?'
>>> "??".join(["hello", "are", "you", "ok?"])
'hello??are??you??ok?'
```

Replace



```
>>> "hello how are you?".replace(" ", "!")  
'hello!how!are!you?'  
>>> "hello, how are you?".replace("h", "")  
'ello, ow are you?'
```