

# NumPy - String Functions

The following functions are used to perform vectorized string operations for arrays of dtype `numpy.string_` or `numpy.unicode_`. They are based on the standard string functions in Python's built-in library.

Sr.No.	Function & Description
1	<b><u>add()</u></b>  Returns element-wise string concatenation for two arrays of str or Unicode
2	<b><u>multiply()</u></b>  Returns the string with multiple concatenation, element-wise
3	<b><u>center()</u></b>  Returns a copy of the given string with elements centered in a string of specified length
4	<b><u>capitalize()</u></b>  Returns a copy of the string with only the first character capitalized
5	<b><u>title()</u></b>  Returns the element-wise title cased version of the string or unicode
6	<b><u>lower()</u></b>  Returns an array with the elements converted to lowercase
7	<b><u>upper()</u></b>  Returns an array with the elements converted to uppercase

8	<b><u>split()</u></b> Returns a list of the words in the string, using separator as delimiter
9	<b><u>splitlines()</u></b> Returns a list of the lines in the element, breaking at the line boundaries
10	<b><u>strip()</u></b> Returns a copy with the leading and trailing characters removed
11	<b><u>join()</u></b> Returns a string which is the concatenation of the strings in the sequence
12	<b><u>replace()</u></b> Returns a copy of the string with all occurrences of substring replaced by the new string
13	<b><u>decode()</u></b> Calls str.decode element-wise
14	<b><u>encode()</u></b> Calls str.encode element-wise

These functions are defined in character array class (numpy.char). The older Numarray package contained chararray class. The above functions in numpy.char class are useful in performing vectorized string operations.