

# Ch13: String functions

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# String in Python

- File object can mediate access to a real on-disk file or to another type of storage or communication device (for example standard input/output, in-memory buffers, sockets, pipes, etc.).
- There are 3 categories of files
  - Raw binary files
  - Binary files
  - Text files

# Example

```
text = "Hello World"
```

```
print(text)  
print(text[0])  
print(text[-1])
```

Access 1  
char

```
print(text[3:8])  
print(text[3: -2])
```

Slice  
string

```
text[2]="E"  
print(text)
```

Update 1  
char

```
text = "Computer Programming"  
print(text)
```

Update  
string

```
del text[3]  
print(text)
```

Delete 1  
char

```
del text
```

# Example

```
text = "Hello I \' m Computer \"Geek\" at C:\\Python\\Test "  
print(text)  
  
text1 = "{} {} {}".format('Test', 'Computer', 'Programming')  
print(text1)  
  
text1 = "{1} {0} {2}".format('Test', 'Computer', 'Programming')  
print(text1)  
  
text1 = "{a} {b} {c}".format(a='Test', b='Computer', c='Programming')  
print(text1)  
  
text2 = "{0:b}".format(8)  
print(text2)  
text2 = "{0:e}".format(234.98345)  
print(text2)  
text2 = "{0:.2f}".format(3/7)  
print(text2)
```

# Functions

Built-in Function	Description
string.letters	concatenation of the strings lowercase and uppercase
string.lowercase	A string must contain lowercase letters.
string.octdigits	Octadigit in a string
string.punctuation	ASCII characters having punctuation characters.
string.printable	String of characters which are printable
<a href="#"><u>String.endswith()</u></a>	Returns True if a string ends with the given suffix otherwise returns False
<a href="#"><u>String.startswith()</u></a>	Returns True if a string starts with the given prefix otherwise returns False

**Reference:** <https://docs.python.org/2/library/string.html>  
<https://www.geeksforgeeks.org/string-endswith-python/>

# Functions

Built-in Function	Description
<a href="#"><u>String.isdigit()</u></a>	Returns "True" if all characters in the string are digits, Otherwise, It returns "False".
<a href="#"><u>String.isalpha()</u></a>	Returns "True" if all characters in the string are alphabets, Otherwise, It returns "False".
<a href="#"><u>string.isdecimal()</u></a>	Returns true if all characters in a string are decimal.
<a href="#"><u>str.format()</u></a>	one of the string formatting methods in Python3, which allows multiple substitutions and value formatting.
<a href="#"><u>String.index</u></a>	Returns the position of the first occurrence of substring in a string
string.uppercase	A string must contain uppercase letters.

# Functions

Built-in Function	Description
<a href="#"><u>String.len</u></a>	Returns the length of the string.
<a href="#"><u>String.Max</u></a>	Returns the highest alphabetical character in a string.
<a href="#"><u>String.min</u></a>	Returns the minimum alphabetical character in a string.
<a href="#"><u>String.splitlines</u></a>	Returns a list of lines in the string.
<a href="#"><u>string.capitalize</u></a>	Return a word with its first character capitalized.
<a href="#"><u>string.find</u></a>	Return the lowest index in a sub string.
<a href="#"><u>string.count</u></a>	Return the number of (non-overlapping) occurrences of substring sub in string
<a href="#"><u>string.lower</u></a>	Return a copy of s, but with upper case letters converted to lower case.
<a href="#"><u>string.split</u></a>	Return a list of the words of the string, If the optional second argument sep is absent or None