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STRINGS



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strings

- Sequence of characters
- String literals in python are surrounded by either
 - single quotation marks ('hello') or
 - double quotation marks ("hello").

strings

- String is an array:

```
a = "Hello, World!"  
print(a[1])
```



slicing

- Return a range of characters by using the slice syntax.

```
a = "Hello, World!"  
print(a[2:5])
```

- Negative indexes to start the slice from the end of the string:

```
b = "Hello, World!"  
print(b[-5:-2])
```



Methods

- `capitalize()` Converts the first character to upper case
- `casefold()` Converts string into lower case
- `center()` Returns a centered string
- `count()` Returns the number of times a specified value occurs in a string
- `encode()` Returns an encoded version of the string
- `endswith()` Returns true if the string ends with the specified value
- `expandtabs()` Sets the tab size of the string
- `find()` Searches the string for a specified value and returns the position of where it was found
- `format()` Formats specified values in a string
- `format_map()` Formats specified values in a string
- `index()` Searches the string for a specified value and returns the position of where it was found
- `isalnum()` Returns True if all characters in the string are alphanumeric
- `isalpha()` Returns True if all characters in the string are in the alphabet
- `isdecimal()` Returns True if all characters in the string are decimals
- `isdigit()` Returns True if all characters in the string are digits
- `isidentifier()` Returns True if the string is an identifier
- `islower()` Returns True if all characters in the string are lower case
- `isnumeric()` Returns True if all characters in the string are numeric
- `isprintable()` Returns True if all characters in the string are printable
- `isspace()` Returns True if all characters in the string are whitespaces
- `istitle()` Returns True if the string follows the rules of a title
- `isupper()` Returns True if all characters in the string are upper case
- `join()` Joins the elements of an iterable to the end of the string



Methods

- `ljust()`
Returns a left justified version of the string
- `lower()`
Converts a string into lower case
- `lstrip()`
Returns a left trim version of the string
- `maketrans()`
Returns a translation table to be used in translations
- `partition()`
Returns a tuple where the string is parted into three parts
- `replace()`
Returns a string where a specified value is replaced with a specified value
- `rfind()`
Searches the string for a specified value and returns the last position of where it was found
- `rindex()`
Searches the string for a specified value and returns the last position of where it was found
- `rjust()`
Returns a right justified version of the string
- `rpartition()`
Returns a tuple where the string is parted into three parts
- `rsplit()`
Splits the string at the specified separator, and returns a list
- `rstrip()`
Returns a right trim version of the string
- `split()`
Splits the string at the specified separator, and returns a list
- `splitlines()`
Splits the string at line breaks and returns a list
- `startswith()`
Returns true if the string starts with the specified value
- `strip()`
Returns a trimmed version of the string
- `swapcase()`
Swaps cases, lower case becomes upper case and vice versa
- `title()`
Converts the first character of each word to upper case
- `translate()`
Returns a translated string
- `upper()`
Converts a string into upper case
- `zfill()`
Fills the string with a specified number of 0 values at the beginning



format

- Example with just one parameter

```
age = 22  
txt = "My name is John, and I am {}"  
print(txt.format(age))
```

- More than one

```
name = 'Mark'  
age = 22  
txt = "My name is {}, and I am {}"  
print(txt.format(name, age))
```



find

- The `find()` method finds the first occurrence of the specified value.

```
x = "like looking for a needle in a  
haystack"  
x = txt.find("needle")  
print(x)
```

- What will happen if I want to find a “pin”?

replace

- The replace() method replaces a specified phrase with another specified phrase.

```
txt = "We should eat sprouts"  
x = txt.replace("sprouts", "hamburgers")  
print(x)
```

split

- Split a string into a list where each word is a list item:

```
txt = "ISEG is the best"  
x = txt.split()  
print(x)
```



strip

- Remove spaces at the beginning and at the end of the string:

```
txt = "banana"  
x = txt.strip()
```