

String

- A String is a *sequence* of characters
- We can index a string

```
s = 'abcd'
print(s[0])
print(s[2])
```

String Slicing

string[start:stop:step]

- Default: Start = 0, Stop = [len\(\)](#)

```
s = 'abcdef'
print(s[0:2])
print(s[1:2])
print(s[:2])
print(s[1:5:3])
print(s[::2])
print(s[::-1])
```

```
s1 = '1234567890'
print(s1[8:2:-12])
print(s1[-2:2:-2])
print(s1[8:-7:-2])
print(s1[8:3:-2])
print(s1[-2:3:-2])
print(s1[8:4:-2])
```

Method

capitalize()

- Converts the *first character to upper case* .

```
text = "hello world"
result = text.capitalize()
print(result)
```

casefold()

- Converts string into *lower case* .

```
text = "Hello World"
result = text.casefold()
print(result)
```

center()

- Returns a *centered string* .

```
text = "hello"
result = text.center(10)
print(result)
```

count()

- Returns the *number of times a specified value occurs in a string* .

```
text = "apple, orange, banana, apple"
result = text.count("apple")
print(result)
```

encode()

- Returns an *encoded* version of the string.

```
text = "hello"
result = text.encode()
print(result)
```

endswith()

- Returns true if the *string ends with the specified value* .

```
text = "hello"
result = text.endswith("lo")
print(result)
```

expandtabs()

- ▮ Sets the **tab size** of the string.

```
text = "hello\tworld"
result = text.expandtabs(4)
print(result)
```

find()

- ▮ Searches the string for a **specified value** and returns the **position** of where it was found.

```
text = "hello world"
result = text.find("world")
print(result)
```

format()

- ▮ Formats **specified values in a string**.

```
text = "My name is {}, and I am {} years old."
result = text.format("Dipshit", 69)
print(result)
```

format_map()

- ▮ Formats **specified values in a string**.

```
text = "My name is {name}, and I am {age} years old."
result = text.format_map({"name": "Fkface", "age": 69})
print(result)
```

index()

- ▮ Searches the string for a **specified value** and returns the **position** of where it was found.

```
text = "hello world"
result = text.index("world")
print(result)
```

isalnum()

- ▮ Returns True if **all characters in the string are alphanumeric**.

```
text = "Hello123"
result = text.isalnum()
print(result)
```

isalpha()

- ▮ Returns True if **all characters in the string are in the alphabet**.

```
text = "Hello"
result = text.isalpha()
print(result)
```

isascii()

- ▮ Returns True if **all characters in the string are ascii characters**.

```
text = "Hello"
result = text.isascii()
print(result)
```

isdecimal()

- ▮ Returns True if **all characters in the string are decimals**.

```
text = "12345"
result = text.isdecimal()
print(result)
```

isdigit()

- ▮ Returns True if **all characters in the string are digits**.

```
text = "12345"
result = text.isdigit()
print(result)
```

isidentifier()

- ▮ Returns True if the **string is an identifier**.

```
text = "variable_name"
result = text.isidentifier()
print(result)
```

islower()

- >Returns True if **all characters in the string are lowercase**.

```
text = "hello"
result = text.islower()
print(result)
```

isnumeric()

- >Returns True if **all characters in the string are numeric**.

```
text = "12345"
result = text.isnumeric()
print(result)
```

isprintable()

- >Returns True if **all characters in the string are printable**.

```
text = "hello\nworld"
result = text.isprintable()
print(result)
```

isspace()

- >Returns True if **all characters in the string are whitespaces**.

```
text = "   "
result = text.isspace()
print(result)
```

istitle()

- >Returns True if the **string follows the rules of a title**.

```
text = "Hello World"
result = text.istitle()
print(result)
```

isupper()

- >Returns True if **all characters in the string are uppercase**.

```
text = "HELLO"
result = text.isupper()
print(result)
```

join()

- Converts the elements of an **iterable into a string**.

```
elements = ["apple", "orange", "banana"]
result = ", ".join(elements)
print(result)
```

ljust()

- Returns a **left-justified** version of the string.

```
text = "hello"
result = text.ljust(10)
print(result)
```

lower()

- Converts a string into **lowercase**.

```
text = "Hello"
result = text.lower()
print(result)
```

lstrip()

- Returns a **left-trimmed** version of the string.

```
text = "  hello"
result = text.lstrip()
```



```
print(result)
```

maketrans()

- ▮ Returns a **translation table** to be used in translations.

```
before = "aeiou"
after = "12345"
trans_table = str.maketrans(before, after)
text = "hello"
result = text.translate(trans_table)
print(result)
```

partition()

- ▮ Returns a tuple where the **string is parted into three parts**.

```
text = "hello world"
result = text.partition(" ")
print(result)
```

replace()

- ▮ Returns a string where a **specified value is replaced with a specified value**.

```
text = "Hello, World!"
result = text.replace("Hello", "Hi")
print(result)
```

rfind()

- ▮ **Searches** the string for a **specified value** and returns the **last position** of where it was found.

```
text = "hello world"
result = text.rfind("world")
print(result)
```

rindex()

- ▮ **Searches** the string for a **specified value** and returns the **last position** of where it was found.

```
text = "hello world"
result = text.rindex("world")
print(result)
```

rjust()

- ▮ Returns a **right-justified** version of the string.

```
text = "hello"
result = text.rjust(10)
print(result)
```

rpartition()

- ▮ Returns a tuple where the string is **parted into three parts**.

```
text = "hello world"
result = text.rpartition(" ")
print(result)
```

rsplit()

- ▮ **Splits the string at the specified separator** and returns a list.

```
text = "apple,orange,banana"
result = text.rsplit(",")
print(result)
```

rstrip()

- ▮ Returns a **right-trimmed** version of the string.

```
text = "hello   "
result = text.rstrip()
print(result)
```

split()

- ▮ **Splits the string at the specified separator** and returns a list.

```
text = "apple,orange,banana"
result = text.split(",")
```

```
print(result)
```

splitlines()

- ▮ Splits the string at line breaks and returns a list.

```
text = "Hello\nWorld"
result = text.splitlines()
print(result)
```

startswith()

- ▮ Returns true if the string starts with the specified value .

```
text = "Hello, World!"
result = text.startswith("Hello")
print(result)
```

strip()

- ▮ Returns a trimmed version of the string.

```
text = "  hello  "
result = text.strip()
print(result)
```

swapcase()

- ▮ Swaps cases , lowercase becomes uppercase and vice versa.

```
text = "Hello World"
result = text.swapcase()
print(result)
```

title()

- ▮ Converts the first character of each word to uppercase .

```
text = "hello world"
result = text.title()
print(result)
```

translate()

- ▮ Returns a translated string .

```
before = "aeiou"
after = "12345"
trans_table = str.maketrans(before, after)
text = "hello"
result = text.translate(trans_table)
print(result)
```

upper()

- ▮ Converts a string into uppercase .

```
text = "hello"
result = text.upper()
print(result)
```

zfill()

- ▮ Fills the string with a specified number of 0 values at the beginning.

```
text = "42"
result = text.zfill(5)
print(result)
```