

# Manipulating strings

```
In [4]: print("Hello there!\nHow are you?\nI'm doing fine.")
```

```
Hello there!
How are you?
I'm doing fine.
```

```
In [20]: print('Hello python\nHow are you going?\nIt\'s fine for you.')
```

```
Hello python
How are you going?
It's fine for you.
```

```
In [22]: print(r"Hello there!\nHow are you?\nI\'m doing fine.")
```

```
Hello there!\nHow are you?\nI\'m doing fine.
```

# Multiline strings

```
In [25]: print(
        """Dear Alice,

        Eve's cat has been arrested for catnapping
        cat burglary, and extortion.

        Sincerely,
        Bob"""
    )
```

```
Dear Alice,
```

```
Eve's cat has been arrested for catnapping
cat burglary, and extortion.
```

```
Sincerely,
Bob
```

# indexing

```
In [28]: spam = 'Hello wrold'
```

```
In [30]: spam[0]
```

```
Out[30]: 'H'
```

```
In [32]: spam[4]
```

```
Out[32]: 'o'
```

```
In [34]: spam[-1]
```

```
Out[34]: 'd'
```

## slicing

```
In [37]: spam = 'Hello world'
```

```
In [39]: spam[0:5]
```

```
Out[39]: 'Hello'
```

```
In [41]: spam[:5]
```

```
Out[41]: 'Hello'
```

```
In [45]: = {''}
```

```
Cell In[45], line 1
      = {''}
      ^
SyntaxError: invalid syntax
```

```
In [47]: spam[-1]
```

```
Out[47]: 'd'
```

```
In [55]: spam[::-1]
```

```
Out[55]: 'dlrow olleH'
```

```
In [57]: spam[::-3]
```

```
Out[57]: 'doee'
```

```
In [59]: fizz = spam [0:5]
fizz
```

```
Out[59]: 'Hello'
```

## The in and not in operators

```
In [64]: 'Hello' in 'Hello World'
```

```
Out[64]: True
```

```
In [66]: 'Hello' in 'Hello Wrold'
```

```
Out[66]: True
```

```
In [70]: "Hello" in "Hello"
```

```
Out[70]: True
```

```
In [82]: "HELLO" in 'Hello World'
```

```
Out[82]: False
```

```
In [78]: '' in 'spam'
```

```
Out[78]: True
```

```
In [80]: 'cats' not in 'cats and dogs'
```

```
Out[80]: False
```

## upper(),lower(),and title()

```
In [85]: greet = 'Hello world'
```

```
In [87]: greet
```

```
Out[87]: 'Hello world'
```

```
In [89]: greet.upper()
```

```
Out[89]: 'HELLO WORLD'
```

```
In [91]: greet.lower()
```

```
Out[91]: 'hello world'
```

```
In [93]: greet.capitalize()
```

```
Out[93]: 'Hello world'
```

```
In [95]: greet.title()
```

```
Out[95]: 'Hello World'
```

## isupper(),islower(),methods

```
In [102...] spam = 'Hello world!'  
spam.islower()
```

```
Out[102...] False
```

```
In [108...] spam.isupper()
```

```
Out[108...] False
```

```
In [116...] spam.capitalize()
```

```
Out[116...] 'Hello world!'
```

```
In [118... 'abc1234'.islower()
```

```
Out[118... True
```

```
In [122... '1234'.islower()
```

```
Out[122... False
```

## starts with () and endswith()

```
In [128... 'Hello world!'.startswith('Hello')
```

```
Out[128... True
```

```
In [130... 'hello world'.endswith('world')
```

```
Out[130... True
```

```
In [134... 'abc123'.startswith('abcef')
```

```
Out[134... False
```

```
In [136... 'abc123'.endswith('123')
```

```
Out[136... True
```

```
In [142... 'Hello world'.startswith("Hello world") # endswith also
```

```
Out[142... True
```

## join() and split()

join()

```
In [147... >>> ''.join(['My', 'name', 'is', 'Simon'])
```

```
Out[147... 'MynameisSimon'
```

```
In [151... >>> ', '.join(['cats', 'rats', 'hats', 'bats'])
```

```
Out[151... 'cats, rats, hats, bats'
```

```
In [153... >>> ' '.join(['My', 'name', 'is', 'Simon'])
```

```
Out[153... 'My name is Simon'
```

```
In [169... >>> 'ABC '.join(['My', 'name', 'is', 'Simon'])
```

```
Out[169... 'MyABC nameABC isABC Simon'
```

# split()

```
In [174... 'My Name Is Simon'.split()
Out[174... ['My', 'Name', 'Is', 'Simon']

In [176... 'Myabcname abcis abcSimon'.split('abc')
Out[176... ['My', 'name ', 'is ', 'Simon']

In [180... 'My Name Is Simon'.split('m')
Out[180... ['My Na', 'e Is Si', 'on']

In [194... 'My Name Is Simon'.split(' ')
Out[194... ['My', 'Name', 'Is', 'Simon']
```

# Justifying text with rjust(),ljust() and Center()

```
In [197... 'Hello'.rjust(10)
Out[197... '      Hello'

In [203... 'Hello'.rjust(20)
Out[203... '                Hello'

In [215... "hello world".rjust(40)
Out[215... '                        hello world'

In [213... 'Hello'.ljust(40)
Out[213... 'Hello                                     '

In [219... 'Hello'.center(20)
Out[219... '      Hello      '

In [221... 'Hello'.rjust(40, '*')
Out[221... '*****Hello'

In [229... 'Hello'.ljust(40, '-')
Out[229... 'Hello-----'

In [231... 'Hello'.center(20, '=')
Out[231... 'Hello====='
```

```
Out[231...] '====Hello===='
```

## Removing whitespace with strip(),rstrip(),and lstrip()

```
In [236...] spam = '    Hello world    '  
spam.strip()
```

```
Out[236...] 'Hello world'
```

```
In [238...] spam.lstrip()
```

```
Out[238...] 'Hello world    '
```

```
In [240...] spam.rstrip()
```

```
Out[240...] '    Hello world'
```

```
In [293...] spam = 'spamspambaconspameggsspamspam'  
spam.strip('spam')
```

```
Out[293...] 'baconspamegg'
```

```
In [246...] sentence = 'one sheep two sheep three sheep four'  
sentence.count('sheep')
```

```
Out[246...] 3
```

```
In [248...] sentence.count('e')
```

```
Out[248...] 9
```

```
In [250...] sentence.count('o')
```

```
Out[250...] 3
```

```
In [264...] sentence.count('e',6)
```

```
Out[264...] 8
```

```
In [266...] sentence.count('e',8)
```

```
Out[266...] 6
```

## Replace Method

```
In [279...] text = "Hello World!"  
text.replace("World","planet")
```

```
Out[279...] 'Hello planet!'
```

```
In [285... fruits = "apple','banana', 'cherry','apple"  
fruits.replace('apple','oranges',1)
```

```
Out[285... "oranges','banana', 'cherry','apple"
```

```
In [289... sentences = " I like apples, Apples are my favourite fruits"  
sentences.replace('apples','Kiwi')
```

```
Out[289... ' I like Kiwi, Apples are my favourite fruits'
```

## python print

```
In [296... a = 10  
b = 20  
a  
b
```

```
Out[296... 20
```

```
In [298... a = 10  
b = 30  
print(a)  
print(b)
```

```
10  
30
```

```
In [300... print(10)  
print(20)  
print('python')  
print(10,20,'pythpon')
```

```
10  
20  
python  
10 20 pythpon
```

```
In [304... num1 = 20  
num2 = 30  
num3 = num1 + num2  
print(num3)
```

```
50
```

## print result with string

```
In [313... num1 = 20  
num2 = 30  
add = num1 + num2  
print('The Additon of',num1, 'and' , num2 , 'is=',add)
```

```
The Additon of 20 and 30 is= 50
```

```
In [315... name = 'python'
age = 30
city = 'hyd'
```

```
In [319... print('My name is',name, 'and my age is',age,'I am living in',city)
```

My name is python and my age is 30 I am living in hyd

```
In [333... num1 = 20
num2 = 30
add = num1 + num2
print('The addition of {} and {}is= {}'.format(num1,num2,add))
```

The addition of 20 and 30is= 50

```
In [339... name = 'python'
age = 30
city = 'hyd'
print('The addition of {} and {} is {}'.format(name,age,city))
```

The addition of python and 30 is hyd

```
In [341... name = 'python'
age = 30
city = 'hyd'
print('hello my name is{} and i am {} years old and i am living in {}'.format(n
```

"hello my name is python and i am 30 years old and i am living in hyd

```
In [345... num1 = 100
num2 = 25
num3 = 333
avg=(num1+num2+num3)/3
avg
```

Out[345... 152.66666666666666

```
In [353... num1 = 100
num2 = 25
num3 = 333
avg=(num1+num2+num3)/3
avg1= round((num1+num2+num3)/3,4)
avg1
```

Out[353... 152.6667

```
In [367... print('The average of {},{} and {} is {} or {}'.format(num1,num2,num3,avg,avg1))
```

The average of 100,25 and 333 is 152.66666666666666 or 152.6667

```
In [385... num1 = 100
num2 = 25
num3 = 333
avg=(num1+num2+num3)/3
avg
print(f'The average of {num1},{num2} and {num3} is {avg} or {avg1}.')
```

The average of 100,25 and 333 is 152.66666666666666 or 152.6667.



```
In [393... name = ' python'
age = 30
city = 'hyd'
print(f'Hello my name is{name}, and i am {age} years of old and i am from {city}')
```

Hello my name is python, and i am 30 years of old and i am from hyd

```
In [409... name = ' python'
age = 30
city = 'hyd'
print(f'Hello my name is{name}, and i am {age} years of old and i am from {city}')
print("hello my name is",name,"i am",age, "year old and i am from",city)
print('Hello my name is {} and i am {} years of old and i am from {}'.format(nam
```

Hello my name is python, and i am 30 years of old and i am from hyd

hello my name is python i am 30 year old and i am from hyd

Hello my name is python and i am 30 years of old and i am from hyd

## end STATEMENT

```
In [412... print('Hello')
print('world')
```

Hello  
world

```
In [416... print('Hello', end=' ')
print('world')
```

Hello world

## Seprator

```
In [419... print('hello','my','name','is','Aron', sep='*****')
```

hello\*\*\*\*\*my\*\*\*\*\*name\*\*\*\*\*is\*\*\*\*\*Aron

```
In [425... print('Aron','gmail','how are you',sep='@ ')
```

Aron@ gmail@ how are you

```
In [431... print('Hello' , 'hey', 'How are you?', sep=(' '))
```

Hello hey How are you?

```
In [437... print(1, '.')
```

1 .

```
In [439... print(1, '.',sep='')
```

1.

```
In [441... print(1,2,end=' ')
print(3, '.',sep='')
```

1 2 3.

```
In [445... print("hellow World",2024,end='')  
            print("how are you?.")
```

hellow World 2024how are you?.

```
In [ ]:
```