

# Python Strings

# Strings

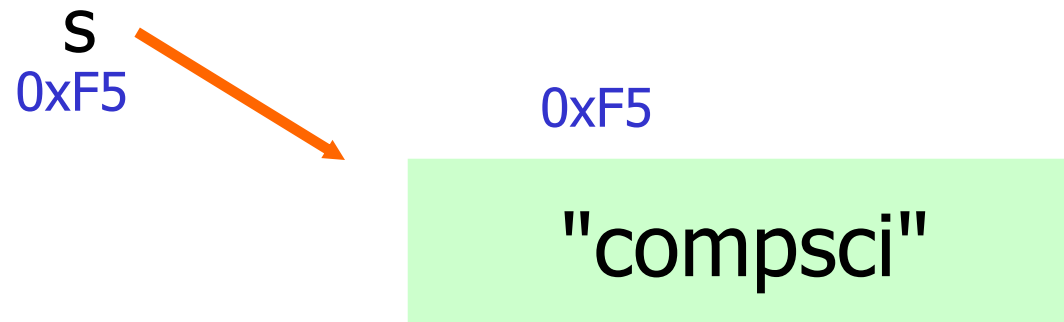
```
s = "compsci";
```

	0	1	2	3	4	5	6
<b>S</b>	<b>c</b>	<b>o</b>	<b>m</b>	<b>p</b>	<b>s</b>	<b>c</b>	<b>i</b>

A string is a group of characters.  
The first character in the group is at spot 0.

# Strings

```
s = "compsci";
```



A reference variable stores the memory address of an object.

# Strings

```
s = "compsci";
```

```
print s[0]  
print s[2]  
print s[6]
```

**OUTPUT**

c  
m  
i

	0	1	2	3	4	5	6
s	c	o	m	p	s	c	i

# substring / slicing

```
s = "compsci";  
print s[0:2]  
print s[1:4]
```

**OUTPUT**

```
co  
omp
```

	0	1	2	3	4	5	6
<b>s</b>	<b>c</b>	<b>o</b>	<b>m</b>	<b>p</b>	<b>s</b>	<b>c</b>	<b>i</b>

**[:] slicing is used to access a section of a string.**

# substring / slicing

```
s = "compsci";  
print s[1:1]  
print s[: -2]
```

**OUTPUT**

comps

	0	1	2	3	4	5	6
<b>s</b>	<b>c</b>	<b>o</b>	<b>m</b>	<b>p</b>	<b>s</b>	<b>c</b>	<b>i</b>

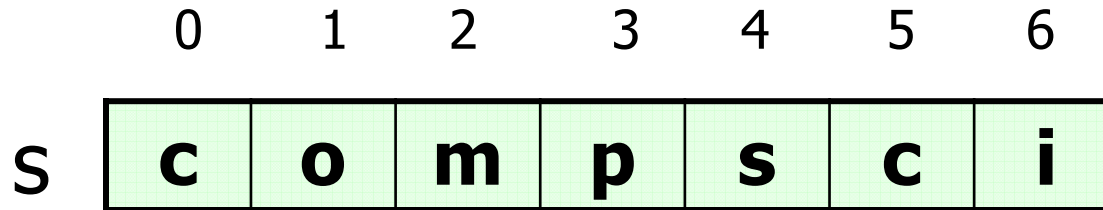
When the 2<sup>nd</sup> value is -1, python stops that many spots from the end.

# substring / slicing

```
s = "compsci";  
print s[3:-1]  
print s[0:-3]
```

**OUTPUT**

psc  
comp



When the 2<sup>nd</sup> value is -1, python stops that many spots from the end.

# Open substring.py



# string methods

## frequently used methods

Name	Use
len()	returns the number of items in the string
find( x)	returns the spot where value x starts in the string - starts searching at spot 0
rfind( x)	returns the spot where value x starts in the string - starts searching at spot len-1

# string - len

```
s = "apuls"  
print len(s)  
s = "compsci"  
print len(s)  
s = ""  
print len(s)
```

## OUTPUT

```
5  
7  
0
```

len counts the characters in the string and returns the count.

**open  
len.py**

# string / find

```
s = "apluscomp sci"  
print s.find("p")  
print s.find("s")
```

**OUTPUT**

1  
4

	0	1	2	3	4	5	6
s	c	o	m	p	s	c	i

Find searches a string for a specified value.  
Find starts searching at spot 0.

# string / find

```
s = "apluscompsci"  
print s.find("c")  
print s.find("m")
```

**OUTPUT**

5  
7

	0	1	2	3	4	5	6
s	c	o	m	p	s	c	i

Find searches a string for a specified value.  
Find starts searching at spot 0.

# string / find

```
s = "apluscompsci"  
print s.find("x")  
print s.find("a")
```

**OUTPUT**

-1

0

	0	1	2	3	4	5	6
s	c	o	m	p	s	c	i

Find searches a string for a specified value.  
Find starts searching at spot 0.

# Open find.py

# string / rfind

```
s = "apluscompsci"  
print s.rfind("p")  
print s.rfind("s")
```

**OUTPUT**

8

9

	0	1	2	3	4	5	6
s	c	o	m	p	s	c	i

rfind searches a string for a specified value.  
rfind starts searching at spot 0.



# string / rfind

```
s = "apluscompsci"  
print s.rfind("c")  
print s.rfind("m")
```

**OUTPUT**

10  
7

	0	1	2	3	4	5	6
s	c	o	m	p	s	c	i

rfind searches a string for a specified value.  
rfind starts searching at spot 0.

# string / rfind

```
s = "apluscompsci"  
print s.rfind("c")  
print s.rfind("m")
```

**OUTPUT**

-1

0

	0	1	2	3	4	5	6
s	c	o	m	p	s	c	i

rfind searches a string for a specified value.  
rfind starts searching at spot 0.

# Open find.py

# Start work On the string Labs