

Strings

a sequence of characters

String data type

```
>>> type("Hello")
```

```
<type 'str'>
```

```
>>> type('world')
```

```
<type 'str'>
```

Single or double quotes

Conversion to number and back

```
int('123')
```

```
float('456.7')
```

```
str(123)
```

```
str(456.7)
```

Operations with strings

- Concatenation +

```
>>> space = " "
```

```
>>> "Hello" + space + "world"
```

```
'Hello world'
```

- Multiplication *

```
>>> ("Hello" + space) * 3
```

```
'Hello Hello Hello '
```

Index

H	e	l	l	o
0	1	2	3	4

string[*index*]

```
>>> string = "Hello"  
>>> letter = string[1]  
>>> print letter  
e
```

Length

H	e	l	l	o
0	1	2	3	4

`len(string)`

```
>>> word = "Hello"
```

```
>>> len(word)
```

```
5
```

Looping through strings

```
word = 'Hello'  
index = 0  
while index < len(word):  
    letter = word[index]  
    print index, letter  
    index = index + 1
```

```
word = 'Hello'  
for letter in word:  
    print letter
```

Slicing

```
>>> string = "Hello world"
```

```
>>> print string[3:8]
```

```
lo wo
```

```
>>> print string[4:]
```

```
o world
```

```
>>> print string[:9]
```

```
Hello wor
```

```
>>> print string[:]
```

```
Hello world
```

H	e	l	l	o		w	o	r	l	d
0	1	2	3	4	5	6	7	8	9	10

Logical expressions with strings

```
>>> "a" in "Hello"
```

```
False
```

```
>>> "lo" in "Hello"
```

```
True
```

```
>>> "hello" == "Hello"
```

```
False
```

```
>>> "hello" != "Hello"
```

```
True
```

```
>>> "world" < "Hello"
```

```
False
```

```
>>> "world" > "Hello"
```

```
True
```

Functions

capitalize	isalnum	lstrip	splitlines
center	isalpha	partition	startswith
count	isdigit	replace	strip
decode	islower	rfind	swapcase
encode	isspace	rindex	title
endswith	istitle	rjust	translate
expandtabs	isupper	rpartition	upper
find	join	rsplit	zfill
format	ljust	rstrip	
index	lower	split	

<https://docs.python.org/2/library/stdtypes.html#string-methods>

Test 5

Questions?

Homework (name and grades,
username from url)

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