

# Python Basics Cheatsheet 1.0

Python is case sensitive.  
Python index starts from 0.  
Spaces/tabs indent code.

**HELP**  
Homepage: help ()  
Function: help (str.replace)  
Module: help (re)

**INSTALL PYTHON**



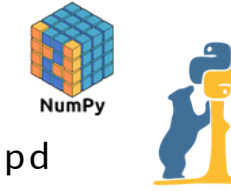


**CHECK DATA TYPE**

```
>>> type (variable)
```

**IMPORT LIBRARIES**

```
>>> import pandas
>>> import pandas as pd
```



**SELECTIVE IMPORT**

```
>>> from math import pi
```



## Variables & Data Types

### 6 common Data Types

strings	booleans
integers	nonetype(none)
floats	datetime

### Variable Assignment

```
>>> x=10
>>> x
>>> 10
```

## Strings Operations

### Strings Operations

```
>>> my_string * 2
'goodmorninggoodmorning'
>>> my_string + 'Sir'
'goodmorningSir'
>>> 'm' in my_string
TRUE
>>> my_string[3]
>>> my_string[4:9]
```

### Strings Methods

String to uppercase	>>> my_string.upper()
String to lowercase	>>> my_string.lower()
Count String elements	>>> my_string.count('w')
Replace String elements	>>> my_string.replace('e', 'i')
Strip whitespaces	>>> my_string.strip()

## Selecting List Elements

### Subset:

```
>>> my_list[1]
>>> my_list[-3]
```

Select item at index 1  
Select 3rd last item

### Slice:

```
>>> my_list[1:3]
>>> my_list[1:]
>>> my_list[:3]
>>> my_list[:]
```

Select items at index 1 and 2  
Select items after index 0  
Select items before index 3  
Copy my\_list

### Subset Lists of Lists:

```
>>> my_list2[1][0]
>>> my_list2[1][:2]
```

my\_list[list][itemOfList]

### Calculations with Variables

Summation	>>> x+5	15
Subtraction	>>> x-5	10
Multiplication	>>> x*5	50
Exponentian	>>> x**5	10000
Remainder	>>> x%5	0
Division	>>> x/float(5)	2

### Type & Types Conversion

Variables to strings	str()	'5', '3.45', 'True'
Variables to integers	int()	5, 3, 1
Variables to floats	float()	5.0, 1.0
Variables to booleans	bool()	True, True, True

## Strings

```
>>> my_string ='goodmorning'
>>> my_string
'goodmorning'
```

## Lists & List Operations

```
>>> a = 'you'
>>> b = 'like'
>>> my_list = [a, b, 'black', 'book']
>>> my_list2 = [[4,5,6,7], [3,4,5,6]]

>>> my_list * 2
['you', 'like', 'black', 'book', 'you', 'like', 'black', 'book']
>>> my_list2 > 4
TRUE

>>> my_list + my_list
['you', 'like', 'black', 'book', 'you', 'like', 'black', 'book']
```

## Lists & List Operations

### Lists Methods

Get the index of an item	>>> my_list.index(a)
Count an item	>>> my_list.count(a)
Remove an item	>>> my_list.remove('!')
Reverse the list	>>> my_list.reverse()
Remove an item	>>> my_list.extend('!')
Insert an item	>>> my_list.insert(0, '!')
Sort the list	>>> my_list.sort()