

# Python

## Python Cheat Sheet

### Strings

" or '  
Escape with \  
Var[0] - 1<sup>st</sup> letter in string var  
Len() - length of string  
lower(), upper()  
Concat with +  
'a' \* 5 - 'aaaaa'  
str() - convert to string  
'Answer is {}'.format('1')  
a.split(',')

### Functions

```
def function1()  
def function2(input)  
def function3(input = default)  
help(function1)  
return a
```

### Math

2\*\*4 – exponent  
5%2 modulo  
int() - float()

### Comment

# - single line  
""" - Multi-line

### Conditionals

```
if a == b:  
elif a ==c: - Else if  
else:
```

### Miscellaneous

import module  
dir(module) – available methods

### Modules

datetime  
re : regular expressions  
Math  
csv

### Lists

Can contain different types  
l = ['a', 'b', 'c']  
l[0] - 1<sup>st</sup> item  
l.append()  
l.insert(0, 'a') – Add at 1<sup>st</sup> position  
l.index('a') – return position of 1<sup>st</sup> a  
l.sort() - len(l)

### Slices

Portion of a list  
s = list1[0:2] – first 3 elements

### Dictionaries

```
d = {'a' : 1}  
d['a'] – returns 1  
d['b'] = 2 – add new record  
del d['b'] – remove record
```

### Tuples

Immutable list  
t = ('a', 'b', 'c')  
tuple() - list()

### Error Handling

```
try:  
except:
```

### Looping

```
for a in list1:  
for a in range(5):  
for a in range(3,6):  
while a < b:
```

### File I/O

```
a = open('c:/folder/file.txt')  
/ for separator  
absolute or relative path  
b = a.read()  
a.close()  
with open('c:/folder/file.txt') as a:  
for line in a: - to read 1 line at a time  
line.rstrip() - remove trailing whitespace  
open(path, mode)
```

### File Modes

```
r = read only (default)  
w = write, clear contents  
x = new file  
A = write, append to end  
a.write('abcd')  
\r\n – carriage return and new line
```