Python Language & Syntax Cheat Sheet

Rule #1: Python is white-space dependent; code blocks are indented using spaces.
Rule #2: Python language is case sensitive. It matters for variables, functions and any keyword in general.

Variable Assignment
myInteger = 1
myString = "Hello World"
myList = ["John", "James", "Laura"]
playerName = input ("What's your name? ")

Basic Arithmetics
i = a + b
i = a - b
i = a / b
i = a * b
i = a % b (Modulus/Remainder)

Adding Comments / Annotations
# Single Line Comment
#

# Multi-line Comment
#

Conversions
# To convert from a numeric type to a string:
str(100)

# To convert from a string to an integer:
int("100")

# To convert from a string to a float:
float("100.5")

# e.g.
myAge = int ( input ("What's Your Age") )

String Manipulation
myString="Hello " + "world"

# The following code would return a list as follows:
# ["John", "James", "Laura"]
myString="John,James,Laura"
myString.split(",")

# The following code would remove spaces at the
# beginning and end of a string
myString=" Hello "
print( myString.strip() ) # this would display "Hello"

Functions
def myFunction ( arg1, arg2,... ) :
    # Code goes here
    return myValue

# e.g.
def mySumFunction ( x, y, z=0 ) :
    sum = x + y + z
    return sum

IF Statements
Warning: Use the 4 spaces rule!!! (Indentation)

if i == 7:
    print "seven"
else:
    print "Not seven!"

if i == 7:
    print "seven"
elif i == 8:
    print "eight"
elif i == 9:
    print "nine"
else:
    print "Not seven, eight or nine"

Loops
Warning: Use the 4 spaces rule!!! (Indentation)

for i in range(1, 10):
    print i

for i in [1, 3, 5, 7]:
    print i

i=0
while i<=100:
    print i

# When using a loop, if you want to exit the loop you can
# use the following instruction:
break

Comparison Operators & Conditions
# These operators can be used in If Statements or with
# While loops. They return True or False!

<table>
<thead>
<tr>
<th>Operator</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>a == b</td>
<td>Is a equal to b?</td>
</tr>
<tr>
<td>a != b</td>
<td>Is a different from b?</td>
</tr>
<tr>
<td>a &lt; b</td>
<td>Is a lower than b?</td>
</tr>
<tr>
<td>a &gt; b</td>
<td>Is a greater than b?</td>
</tr>
<tr>
<td>a &lt;= b</td>
<td>Is a lower or equal to b?</td>
</tr>
<tr>
<td>a &gt;= b</td>
<td>Is a greater or equal to b?</td>
</tr>
<tr>
<td>a is None</td>
<td>Is a null/none?</td>
</tr>
<tr>
<td>a is not None</td>
<td>Is a not null/none?</td>
</tr>
<tr>
<td>a in [&quot;John&quot;, &quot;James&quot;, &quot;Luke&quot;]</td>
<td>Is a one of the value in the given list?</td>
</tr>
</tbody>
</table>

myString.startswith("Hello") Does myString start with the string "Hello"?

"@" in myEmail Does the string myEmail contains the string "@"?

Importing Modules
# Imports should be made at the top of your code: # e.g.
import random

print ( mySumFunction (1, 3, 5) ) # this would display 9