**CHEATSHEET PYTHON 3: Functions**

# How to define a function

def function\_name(argument1, argument2):

"""

Docstrings explain the usage of a function, including the arguments it takes

and the value(s) it returns. The more detailed the better!

"""

# code

# code

return x # function returns "x" to the main body of script

# Example function

def divide\_key(x, y, print\_remainder = False):

"""

Divide two numbers, x and y. Returns the dividend of x/y.

Takes two required positional arguments, numbers x and y, and the

optional keyword argument "print\_remainder" (default False).

If specified as True, then the remainder of the dividend is printed.

"""

# Think about why this "if" statement is included...

if y == 0.:

print "Cannot divide by 0."

return None

if print\_remainder:

print "The remainder is %d" %(x%y)

return float(x) / y

# Example function, re-written with a **try/except** statement instead of **if**

def divide\_key(x, y, print\_remainder = False):

try:

div = float(x) / y

except:

div = None

if print\_remainder:

try:

print "The remainder is %d" %(x%y)

except:

print "The remainder could not be calculated."

return div