# Higher Order Function

if a function accepts another function as argument or return a function as result, that is what you call a higher order function.

# a higher order function that accepts another funtion as arg

def square(x):

return x \* x

def my\_map(func, arg\_list):

result = []

for i in range(len(arg\_list)):

result.append(func(i))

return result

res = my\_map(square, [1, 2, 3, 4, 5])

print(res)

# A higher order function that returns another function as arg

def logger(msg):

def log\_message():

print('Log: ' + msg)

return log\_message

log\_msg = logger('Hello World!')

log\_msg()

# a practical example of why higher order function is important

def html\_tag(tag):

def wrapper(msg):

print("<{0}>{1}</{0}>".format(tag, msg))

return wrapper

printer = html\_tag('h1')

printer('Hello World')