**Week 2 Discussion Forum**

***Example 1:***

def greet(name):

print("Hello, " + name)

greet("Dove")

In this example, a welcome is printed using the function greet, which only accepts the name parameter. The method's parameter is "Dove," and the function is called using the code greet("Dove").

***Example 2:***

def greet(name):

print("Hello, " + name)

greet("Dove") # "Dove" is a value

name = "DK"

greet(name) # name is a variable

greet("Dove" + "DK") # "Dove" + "DK" is an expression

In this case, we make three separate calls—each with a different set of inputs—to the greet function. The initial call calls the function greet("Dove") with a value as the input. The second call greet(name) welcomes the user and takes a variable name as an input. The third call's greeting uses the parameter "Dove " + "DK.".

***Example 3: Construct a function with a local variable. Show what happens when you try to use that variable outside the function. Explain the results.***

def greet(name): message = "Hello, " + name

greet("Dove")

print(message) # error: name 'message' is not defined

In this illustration, the message local variable belongs to the function greet. Because the variable is limited to the function and cannot be accessed outside of the function, when we attempt to access the value of a message outside of the function, we receive the error "message" is not declared.

***Example 4: Construct a function that takes an argument. Give the function parameter a unique name. Show what happens when you try to use that parameter name outside the function. Explain the results.***

def greet(person\_name):

print("Hello, " + person\_name)

greet("Dove") print(person\_name) # error: name 'person\_name' is not defined

In this illustration, the function greet accepts the parameter person name, which is specific to the function. Because the variable is limited to the function and cannot be accessed outside of the function, when we attempt to access the value of person name outside of the function, we receive the error "person name" is not declared.

***Example 5: Show what happens when a variable defined outside a function has the same name as a local variable inside a function. Explain what happens to the value of each variable as the program runs.***

name = "Dove" \

def greet():

name = "Jane"

print("Hello, " + name)

greet()

print(name)

In this example, we define a variable name outside the function with the value "Dove". We define another variable with the value "" inside the function greet.