Lesson 3.03: Return v. Print

# Learning Objectives

* Define and identify: returning, null, void
* Write functions that return values
* Describe the difference between printing and returning

# Materials/Preparation

* Lab handout
* Read through the handout so that you are familiar with the requirements and can assist students

# Pacing Guide

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| --- | --- |
| Duration | Description |
| 5 Minutes | Welcome, attendance, bell work, announcements |
| 10 Minutes | Lecture |
| 30 Minutes | Lab |
| 10 Minutes | Discussion |

# Instructor’s Notes

1. Lecture
   1. Returning
      1. In our builtin/imported functions there are sometimes values returned. Like randin returns a random number
      2. User defined functions can return values as well. Use the return key word followed by a value to return a value from a function
         1. def multiply\_by\_2(num):

return num\*2

* + - 1. a = multiply\_by\_2(100)
      2. what will a a be?
  1. Printing
     1. Discuss how this is different from printing. Printing writes the value to the console as a string while returning gives back the actual value
     2. Comparison as a photo vs actual object.
        1. Show a photo of money/candy. This lets the reader understand
        2. if you want to actual use the money/candy need to return it

1. Lab
   1. Have students create the game of war:
      1. What functions do you need:
         1. Draw card (takes in players name)
         2. Compare Cards
         3. Instructions function
2. Discuss
   1. Different ways students used function