Lesson 3.02: User Defined Functions

# Learning Objectives

* Define and identify: user-defined-functions
* Write user defined functions

# Materials/Preparation

* Lab handout
* Read through the handout so that you are familiar with the requirements and can assist students. Give students an algorithm for shuffling cards

# 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. User Defined Functions
      1. Previously we looked at using built in and imported functions
         1. Go over if there are any questions here
      2. We can create our own functions in python. Here is how
         1. def functionName():

print(“I ama Function.”)

myList = [“a”, “b”, “c”, “d’]

print(myList[0])

* + 1. How many arguments does that function take in. How would you call that function. What does that function do? Notice that you can define variables here
    2. Here is how to
       1. def print\_twice(string\_to\_print):

print(string\_to\_print)

print(string\_to\_print)

* + 1. How many arguments does that function take in? How would you call that function. What does that function do?
  1. Lab
     1. Give students a card shuffling algorithm and a deck of cards
     2. Have students create a function that draws a card from the deck and removes the item from the list. And prints the card
     3. If this doesn’t take too long have students write a function called draw 2 that draws 2 cards and prints them out
  2. Discussion
     1. Look at how the students pulled the numbers from the deck. Discuss other ways to draw a random card
     2. Discuss algorithms for shuffling a deck. What if you didn’t want the cards to be removed how could you get a random card