**Module 9: Lab Activity – While Loops**

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**CSS 225**

**Deliverables:**

Python programs for the following problems. Use the names listed below:

* Problem1Infinite.py
* Problem2NumList10.py
* Problem3NumList35.py
* Problem4NumListDivide.py

**All submitted code must include comments:**

# Your Name

# The Date

# The Problem Number and Description

# Any other information throughout your code that is helpful

**Problem 1:** Write an infinite loop that prints “Infinite”. An infinite loop never ends. The condition is always true.

*#author: Joel Navarrete  
#This program's loop will never end*while True:  
 print(**"Infinite"**)

**Problem 2:** Using a while loop, create a list called L that contains the numbers 0 to 10. On each iteration, the loop should append the current value of a counter variable to the list and then increase the counter by 1. The while loop should stop once the counter variable is greater than 10.

*#author: Joel Navarrete  
#This program has a list with a counter that once it reaches 10 it stops*L = []  
counter = 0  
while counter < 11:  
 L.append(counter)  
 counter = counter + 1  
  
print(L)

**Problem 3:** Using a while loop, ask the user to enter a number. Append each entered number to a list and add them together. Continue asking for a number until the sum of the list of numbers is greater than 100.

*#author: Joel Navarrete  
#The program adds the numbers inputted until it equals or is less than 100*list = []  
  
sum = 0  
  
while sum <= 100:  
 number = int(input(**"Please enter a number: "**))  
 list.append(number)  
 sum = 0  
 for x in list:  
 sum = sum + x  
 *# print(sum)*print(list)

**Problem 4:** Create a while loop that initializes a counter at 0 and will run until the counter reaches 50. If the value of the counter is divisible by 10, append the value to the list called tens. Confirm the list results using a print statement.

*#author: Joel Navarrete  
#This program has numbers divisible by 10 up until 50*list = []  
  
counter = 1  
  
while counter <= 50:  
 if counter % 10 == 0:  
 list.append(counter)  
 counter += 1  
  
print(list)