**2020 Spring: CSEE5590 – Special Topics**

**Python Programming**

**Lesson2: Loops, List, Tuples, Functions in python**

In this lesson all kinds of controls in python will be reviewed.

1. Working with for loops
2. Working with Tuples, Lists, Functions
3. Various kinds of Loops: definite and indefinite loops, using files in loops, Nested Loops

**In Class Programming:**

* Write a program, which reads weights (lbs.) of **N** students into a list and convert these weights to kilograms in a separate list using:

1) Loops and

2) List comprehensions

N: No of students (Read input from user)

**Ex: L1: [150,155, 145, 148]**

**Output: [68.03, 70.3, 65.77, 67.13]**

* Write a program that returns every other char of a given string starting with first using a function named “string\_alternative”

Str = “**G**o**o**d e**v**e**n**i**n**g”

Output: Go vnn

**Note: You need to create a function named “string\_alternative” for this program and call it from main function.**

* Write a python program to find the wordcount in a file for each line and then print the output. Finally store the output back to the file.

**Input: a file includes two line**

Python Course

Deep Learning Course

**Output:**

Python: 1

Course: 2

Deep: 1

Learning: 1

**Note: Your program should work for any number of lines.**