Homework 6 (Max Points:100) Due Date: October 22 by 11:59 pm EST

Instructions:

- 1. Each response should be in a .py file. Submit all your code to https://submitty.cs.rpi.edu
- 2. For all questions inputs are given. User Input is not required.
- 3. For all output: Print using a print() statement

Answer the following questions:

- 1. Given a list called 'values' as an Input, write a function called smallest_two (without using loops) that returns a list containing the two smallest values in the input list. For example, if values = [35, 34, 20, 40, 60, 30] then the output must be [20,30]. (30 points)
- 2. Answer the following questions by writing a separate code for each part but submit as a single .py file:

Months = ['Jan', 'Feb', 'Mar', 'Apr', 'May', 'June', 'Jul', 'Aug', 'Sep', 'Oct', 'Nov', 'Dec'].

- a. Write code to show/illustrate 3 different list methods that can be used to remove 'Dec' from the list Months. (10 points)
- b. Output a list that has elements at even indices of the list Months i.e. at 0,2,4 and so on. (10 points)
- c. Print/Output a list such that all the elements of Months are reversed i.e. Dec comes first and Jan comes last. (10 points)
- d. Print/Output a list that has all elements of Months in alphabetical order. (10 points)
- 3. You are given a list called grades that has the grades of all students from a language class; grades = [89,58,77,83,99,78,65,88,94,81,67]. Do the following (**submit all the parts in a single .py file**): (20 points)
 - a. Print an ordered list of grades with the lowest grade first and the highest at the end.
 - b. Print the average grade for the class
- 4. **Answer the following**, and submit a single .py file for all responses:
 - a. Given a string **s='It is a nice and bright day'**, output/print a list such that it has the following elements: ['It', 'is', 'a', 'nice', 'and', 'bright', 'day']. (**10 points**)
 - b. Given a list l= ['This','game', 'is','very','boring'], output/print a string as shown: **Thisgame-is-very-boring.** (10 points)