**Homework 9** (**Max Points:100) Due Date: April 8 by 11:59 pm EST**

**Instructions: Each response should be in a .py file. Submit all your code to** [**https://submitty.cs.rpi.edu**](https://submitty.cs.rpi.edu)

**Answer the following questions:**

1. If A**=** {1, 3, 5}, B = {3, 5, 6} and C = {1, 3, 7} . ShowthatA ∪ (B ∩ C) = (A ∪ B) ∩ (A ∪ C). (**25 points**)
2. Let A = {a, b, d, e}, B = {b, c, e, f} and C = {d, e, f, g}   
     
   (i) Verify A ∩ (B ∪ C) = (A ∩ B) ∪ (A ∩ C)   
     
   (ii) Verify A ∪ (B ∩ C) = (A ∪ B) ∩ (A ∪ C)

For both parts above write down as comments in your .py file if the relationship is verified or not. (**50 points)**

1. Write a Python program to find maximum and the minimum value in a set with values 5,10,3,15,2,20. *Hint: Use max and min functions.* (**25 points**)