**ITEC 136 Homework 5 Name: \_\_Danielle Hooven\_\_\_\_\_**

1. **[10 points]** Develop a recursive function called **is\_palindrome** that takes a string as a parameter and returns **True** if the string is a palindrome, **False** otherwise. Remember that a string is a palindrome if it is spelled the same both forward and backward. No global variables are used in the function. Function parameters must be used.  
     
   **Example**:   
   radar is a palindrome.

**Note**: Palindromes can also be phrases, but you need to remove the spaces and punctuation before checking. Write a function to keep only the alphabets in the text string and use it in conjunction with the above **is\_palindrome** function to determine if the phrase is a palindrome.  
  
Some fun palindromes:

* kayak
* Live not on evil
* Reviled did I live, said I, as evil I did deliver
* Go hang a salami; I’m a lasagna hog.
* Kanakanak – a town in Alaska
* Wassamassaw – a town in South Dakota

1. **[10 points]** Please create your tree by customizing the following code. Explain in detail how the code works. Do not state the obvious such as what each line of the code does.

**import** turtle  
  
**def** tree(branchLen,t):  
 **if** branchLen > 5:  
 t.forward(branchLen)  
 t.right(20)  
 tree(branchLen-15,t)  
 t.left(40)  
 tree(branchLen-15,t)  
 t.right(20)  
 t.backward(branchLen)  
  
**def** main():  
 t = turtle.Turtle()  
 myWin = turtle.Screen()  
 t.left(90)  
 t.up()  
 t.backward(100)  
 t.down()  
 t.color("green")  
 tree(75,t)  
 myWin.exitonclick()  
  
main()

1. **[5 points]** Weekly Learning and Reflection  
   In two to three paragraphs of prose (i.e. sentences, not bullet lists) using APA style citations if needed, summarize and interact with the content that was covered in the introductory videos provided for this course. In your summary, you should highlight the major topics, theories, practices, and knowledge that were covered. Your summary should also interact with the material through personal observations, reflections, and applications to the field of study. In particular, highlight what surprised, enlightened, or otherwise engaged you. Make sure to include at least one thing that you’re still confused about. In other words, you should think and write critically not just about what was presented but also what you have learned through the session. Feel free to ask questions in this as well since it will be returned to you with answers.