**Homework 3** (**Max Points:100) Due Date: October 1 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. **Write a Python function that checks whether a passed string is palindrome or not.**

Note: A palindrome is word, phrase, or sequence that reads the same backward as forward, e.g., madam or nurses run. Hint: Remove the spaces between words first and use ‘slicing’. (50 points)

1. Write a Python function that calculates the total surface area of a cylinder with inputs as radius and height of the cylinder. This function must call another function that calculates the area of the base (circle). Hint: Create a function that calculates area of a circle first (with input as radius). (20 points)
2. Write a function that takes a 2-digit number as input and returns its tens digit. For example if the input is 83, the output must be 8. (30 points)