Lab 2: Basics Python Programming

1. Write a script to define and convert a ***string*** variable named ***s*** to an ***integer*** value. So if ***s*** were associated with "41" then the resulting ***integer*** would be 41. Then convert this string variable into a float value.

2. Calculate the BMI of a person using the formula ***BMI*** = Weight in Pounds / (Height in inches × Height in inches) × 703 and assign the value to the variable ***bmi***. Write a script to do this.

3. In mathematics, the ***Nth*** harmonic number is defined to be 1 + 1/2 + 1/3 + 1/4 + ... + 1/N, where ***N*** is a positive integer. So, the first harmonic number is 1, the second is 1.5, the third is 1.83333, and so on. Assume that ***hn*** is a variable whose value is the ***Nth*** harmonic number. Write a script to calculate the value of ***hn*** using ***N*** given on the command line.

4. Write a script that prints a uniformly distributed random number between -1 and 1. The number should be written with four decimals as implied by the ***%.4f*** format.