**Random Module – Day 1**  
**\*\*\*Save these programs in the appropriate folder\*\*\***

1. Use the **random** module to simulate each scenario.
   1. Simulate the sum of the rolls of two dice, by generating a random number between 2 and 12.
   2. Simulate the sum of the rolls of two dice, by generating two random numbers between 1 and 6, then adding them.
   3. Explain how the two scenarios above are different, even though they result in the same values. Which one is correct?  
      I believe that the second one is correct because it shows the different values of both dice in factuality they will both have the same task and output (other than the numbers being random)
2. Write programs to accomplish each task.
   1. Generate a random floating-point value f such that 5 ≤ f < 15.
   2. Generate a random tax rate between 10 and 20%, then calculate the tax on an item whose price is determined by the user.
   3. Make two random selections from the letters in your name, then check if they are the same.
   4. Generate three random letters, and check if exactly two of them are vowels.

3. Use the random module to simulate flipping a coin 20 times. Print the sequence of tosses, and calculate the following – hint – use a FOR LOOP

1. the number of heads flipped
2. the number of changes in the sequence (either tails to heads, or heads to tails)
3. the longest sequence of consecutive tosses that are of the same face