Assignment 17: For Loops

1. Create a project called ForLoopFun.py.
2. In between each of the following parts, print a blank line using print “”
3. First, use a for loop to print “I love Python” 10 times.
4. Then, prompt the user to enter a number, and then use a for loop to count from 0 to that number. Print each number separated by a space. To do that, create an empty string (“”) and in the for loop, attach the number to that string, and then a space. At the end, print the string.
5. Create a list of ints with values 1-10. You can use a for or while loop to fill it. Then, use a for loop to create a copy of the list, where all the values are changed by 2 (add 2 to each number). Create the second list before you fill it using a for loop. Print out the values of the second list separated by spaces.
6. Bonus: Create n list of ints with values 1-100. Use a for loop to print the numbers line by line, but print an exclamation point after multiples of 5. Use an if statement and the math concept of mod:
   1. x mod y gives the remainder when x is divided by y. For example, 5 mod 2 is 1 because 5/2 is 2 remainder 1. In Python, % is mod. So 12 % 5 is 2. Use this to find multiples of 5.
7. Run the program and make sure it works as expected.
8. Email the file to the instructor.