**Activity 7: Python Iterations**

1. Write a Python program that calculates the sum of all even numbers between 1 and 100 (inclusive). Your program should use a loop to iterate through the numbers and check if each number is even. If a number is even, add it to a running total. Finally, print the total sum.

**File Naming:** Save your file as Python\_Activity7.1.py.

1. Write a Python program that counts the number of vowels in a given string. Your program should prompt the user to enter a string, then iterate through each character in the string and check if it is a vowel (a, e, i, o, u). Keep a count of the vowels and print the total count at the end.

**File Naming:** Save your file as Python\_Activity7.2.py.

1. Write a Python program that finds the largest number in a list of integers. Your program should prompt the user to enter a list of numbers separated by spaces. Convert the input into a list of integers, then iterate through the list and compare each number to find the largest one. Print the largest number at the end.

**File Naming:** Save your file as Python\_Activity7.3.py.

1. Write a Python program that reverses a given string. Your program should prompt the user to enter a string, then iterate through the string from the end to the beginning and construct the reversed string. Print the reversed string at the end.

**File Naming:** Save your file as Python\_Activity7.4.py.

1. Write a Python program that prints the multiplication table for a given number. Your program should prompt the user to enter a number, then use a loop to iterate through the numbers 1 to 10 and print the product of the given number and each of these numbers.

**File Naming:** Save your file as Python\_Activity7.5.py.