**Assignment**

1. You're developing a text analysis tool. Your task is to count the number of vowels in a given text input. Write a program that takes a string input from the user and counts the number of vowels (a, e, i, o, u) in the string using a loop and condition.
2. You're given a list of numbers and you need to categorize them as odd or even. Write a program that takes a list of integers as input and prints whether each number is odd or even.
3. You're building a weather application and need to convert temperatures from Celsius to Fahrenheit for display. You're given a list of temperatures in Celsius. Write a program that prints the corresponding temperatures in Fahrenheit.
4. You're analyzing data and need to categorize numbers as positive, negative, or zero. Write a program that takes a list of numbers as input and prints whether each number is positive, negative, or zero.
5. You're developing a text manipulation tool and need to reverse each word in a given sentence. Write a program that takes a sentence as input from the user and prints each word in reverse order. For example, "Hello World" should be printed as "olleH dlroW".
6. You're writing a program to find prime numbers in a given list. Write a program that checks whether each number in a given list is a prime number or not.
7. You're working on a math library and need to calculate the factorial of each number in a given list. Write a program that calculates and prints the factorial of each number in a list of integers
8. You're developing a tool to identify palindromes in a given list of words. Write a program that checks whether each string in a given list is a palindrome or not.
9. You're creating a program to generate Fibonacci sequences. Write a program that generates and prints the Fibonacci sequence up to a given number of terms specified by the user.
10. You're developing an inventory management system for a store. Write a program that categorizes items in stock as either low or high quantity based on a predefined threshold.