Looping and String Manipulation Assignments

This assignment covers fundamental programming concepts related to `for` loops, control flow statements (`break`, `continue`), numerical operations, and string manipulation.

Assignment Tasks

The following tasks require the use of `for` loops and other fundamental programming constructs:

1. Print all even numbers from 1 to 50 using a `for` loop.
2. Print numbers from 1 to 100 but stop the loop if the number is 37. (Use `break`)
3. Print numbers 1 to 50 but skip multiples of 5. (Use `continue`)
4. Take a number from the user and print its multiplication table (1–10).
5. Count how many numbers between 1 to 100 are divisible by 7.
6. Print only the vowels from a string given by the user.
7. Given a string, print the first 5 characters only and stop. (Use `break`)
8. From numbers 1 to 20, skip odd numbers and print only squares of even numbers.
9. Take 10 numbers from the user and print the highest number.
10. Print all characters of a string except spaces. (Use `continue`)
11. Print the sum of all numbers from 1–100 but skip numbers divisible by 3.
12. Given a list of numbers, stop printing when the number 0 is found. (Use `break`)
    - Example: `[3, 4, 1, 0, 7, 9]` → stop at 0
13. Check if a given number is prime or not using a `for` loop.
14. Print the factorial of a number using a `for` loop.
    - Example: 5 → 120
15. Print the smallest number in a list.
16. Count how many vowels are in the string: "Hello Python Programmer"
17. Print numbers 1–30; if a number is divisible by both 4 and 6, then stop. (Use `break`)
18. Print only negative numbers from a given list.
19. Reverse a string using a `for` loop.
    - Example: "python" → "nohtyp"
20. Print the Fibonacci series up to N terms using a `for` loop.