TASK:1

1. **Palindrome Detector:** Write a program in your preferred programming language that checks if a given string is a palindrome. A palindrome is a word, phrase, number, or other sequence of characters that reads the same forward and backward (ignoring spaces, punctuation, and capitalization). Your program should return true if the input is a palindrome and false otherwise.
2. **Prime Number Generator:** Create a program that generates and prints the first N prime numbers, where N is a user-input positive integer. Ensure that your program efficiently identifies prime numbers and outputs them in ascending order. Additionally, provide a brief explanation of the algorithm you used to generate prime numbers.
3. **Word Frequency Counter:** Design a program that takes a paragraph of text as input and outputs the frequency of each word in the text. Ignore punctuation and consider words in a case-insensitive manner. Display the results in alphabetical order based on the words. For example, if the input is "The quick brown fox jumps over the lazy dog. The dog barks, and the fox runs away," the output should be:

```
and: 1
away: 1
barks: 1
brown: 1
dog: 2
fox: 2
jumps: 1
lazy: 1
over: 1
quick: 1
runs: 1
the: 4
```