TASKS

1. Write a function that generates the prime factorization of a number.
2. Write a function that reverses each word in a sentence without changing their order in the sentence. Only spaces separate words.

Example:

Input: "hello world"

*Output: "*olleh *dlrow"*

3. Write a Caesar Cipher function that shifts each letter in a message by a given number of positions. Assume only uppercase letters are used.

Example:

Input: "HELLO", Shift: 3
Output: "KHOOR"

4. Write a function that converts an integer to its binary representation as a string.
5. Write a function that multiplies two matrices of size 2x2 and prints the result.
6. Write a function to find the longest word in a sentence without using any string manipulation libraries. Assume words are separated by single spaces.

Example:

Input: "Find the longest word"

Output: "longest"

7. Write a function that counts the frequency of each unique word in a sentence without using any string manipulation libraries. Assume only spaces separate words, and the words are case-sensitive.

Example:

Input: "cat dog cat"

Output: "cat: 2, dog: 1"

8. Write a function to sort the words in a sentence alphabetically.

Example:

Input: "banana apple cherry"

Output: "apple banana cherry"