Logger

In the next three hours you will implement a custom logger.

The program should be written in C#

The logger will contain multiple appenders - an appender can transform a log message, including its properties, and persist it in predefined storage.

The logger will support the following format:
Time, Severity, Message.

The logger will load an external xml or json configuration file that will have a minimal log severity level and the one or a number of log appenders.

The following appenders and their corresponding properties are required:
1. **Console appender -** output log messages to console.
    a. *Color* - sets the text color printed on the console.
2. **File Appender -** When the file exceeds the maximum file size then it should overwrite the original log file.
    a. *Path* - full or relative path to the log file
    b. *MaxFileSize*
3. **Rolling file appender -** automatically "roll" (archive) the current log file when the file exceeds the maximum file size and resume logging in a new file.
    a. *Path* - full or relative path to the directory here logs are saved
    b. *MaxFileSize*
4. **TCP appender** - Sends log messages to remote TCP host. TCP appender must handle reconnections and process the received data through cache. (Write a simple client for TCP appender).

Show a working demonstration of the Logger.

***Note: Code should be written in C# .NET Core.
*** **Do not use already written code of logger. (Yes, also from the internet…)**

GOOD LUCK!