Implementing a command line application that reads a 24-bit BMP image, applies a Gaussian Blur filter on it and saves the result.

The application should be written in pure C++ in a single CC file. You must not use any 3rd party.

Here's what we want to see:

A basic BMP file reader/writer that will consist of writing a limited BMP file reader/writer which will support 24-bit encoded image files.

The Gaussian Blur must work in tiles as if the destination image was made of sub regions. For information, a tile is a rectangular region. It can be seen as a sub image. The blur operation will be performed separately in 32-bit floating point on each channel (R, G, B).