1. Input Handling: When you run the program, you just need to provide the filename of the BMP image without the ".bmp" extension as a command-line argument.
2. Reading the BMP File: The program analyzes the BMP file header to gather important details about the image like width, height, and color depth. It also processes the color palette and image data from the BMP file.
3. Reducing Image Size: To make the image smaller, the program decreases both the width and height by half while keeping the aspect ratio. It then calculates the updated header information for the shrunken image.
4. Adding a Frame:
The user is required to specify the size of the frame in pixels and afill arbitrary color values for the frame.
Program displays the picture that has the designated frame size and color applied.
5. Creating Merged Image:This module computes the image header for the merged one with the reduced frame is added included.
It specifically splits memory into portions that match image data.
6. Writing the Merged Image:
Then BMP file header and palettes are written by the way of this code.
It writes this new merged data to the file reporting the previous reduced image with a new frame included.
7. Output and Cleanup: Another line the program exudes is the header information for the combined picture. It saves the final achived bmp file. At the end, it clears out the memory allocation and then brings in the console before terminating.