Problem

I had encountered two main problems during the processes of my program. First, the argc and argv problem. It is when I was creating the file name, I had trouble of choosing which is the correct value of argc. Second, the row size problem. When I was developing my program, I encountered a big problem of calculating the value of row size.

How I develop my program

First, I created three function, print_header, write_image_file and Header. Then, in the main function, use the value of argc to verify whether the file is empty. Third, open the input file and read the bitmap data. Forth, print out all the bitmap data. Fifth, calculate the reduced image data and copy some of the data of input image data to reduced image data. Sixth, print out all the data of the reduced image. Seventh, create a colored image while using the input image data. Eighth, place the reduced image on the colored image and print out all the data of the final image. Finally, free the memory space of four different memory space.