Code:

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% RGB color processing to display the red, green, and blue
% color planes of a color image
I = imread('try.jpeg'); % Read the image
r = size(I, 1); % Rows
c = size(I, 2); % Columns
% Initialize R, G, B as M x N x 3 matrices
R = zeros(r, c, 3, 'uint8'); % Red channel
G = zeros(r, c, 3, 'uint8'); % Green channel
B = zeros(r, c, 3, 'uint8'); % Blue channel
% Assign the color planes
R(:, :, 1) = I(:, :, 1); % Red plane
G(:, :, 2) = I(:, :, 2); % Green plane
B(:, :, 3) = I(:, :, 3); % Blue plane
% Display the original color planes
subplot(4,3,1)
imshow(R)
title("RED")
subplot(4,3,2)
imshow(G)
title("GREEN")
subplot(4,3,3)
imshow(B)
title("BLUE")
% Process and display sharpened color planes
processedR = imsharpen(R); % Processed red
subplot(4,3,4)
imshow(processedR)
title("PROCESSED RED")
processedG = imsharpen(G); % Processed green
subplot(4,3,5)
imshow(processedG)
title("PROCESSED GREEN")
processedB = imsharpen(B); % Processed blue
subplot(4,3,6)
imshow(processedB)
title("PROCESSED BLUE")
% Create finalRGB by combining processed channels
finalRGB = zeros(r, c, 3, 'uint8'); % Initialize finalRGB
finalRGB(:, :, 1) = processedR(:, :, 1); % Insert processed red
finalRGB(:, :, 2) = processedG(:, :, 2); % Insert processed green
finalRGB(:, :, 3) = processedB(:, :, 3); % Insert processed blue
% Display the concatenated final RGB image
subplot(4,3,7)
imshow(finalRGB)
title("CONCATENATED-FINAL")
% Display the initial image
subplot(4,3,8)
imshow(I)
title("INITIAL IMAGE")
gr = rgb2gray(I);
subplot(4,3,10);
imshow(gr);
title("Gray image");
```

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bw = im2bw(I);
subplot(4,3,11);
imshow(bw);
title("Black and White image")
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Op: