

Robert Antonius - 2125250057

Perbaiki soal 1 UTS - Menampilkan histogram

```
original_image = imread("original_image_1.jpg");
red_channel = original_image(:,:,1);
green_channel = original_image(:,:,2);
blue_channel = original_image(:,:,3);
red_image = cat(3, red_channel*1, green_channel*0, blue_channel*0);
green_image = cat(3, red_channel*0, green_channel*1, blue_channel*0);
blue_image = cat(3, red_channel*0, green_channel*0, blue_channel*1);
gray_image = rgb2gray(original_image);

% max(max(original_image))

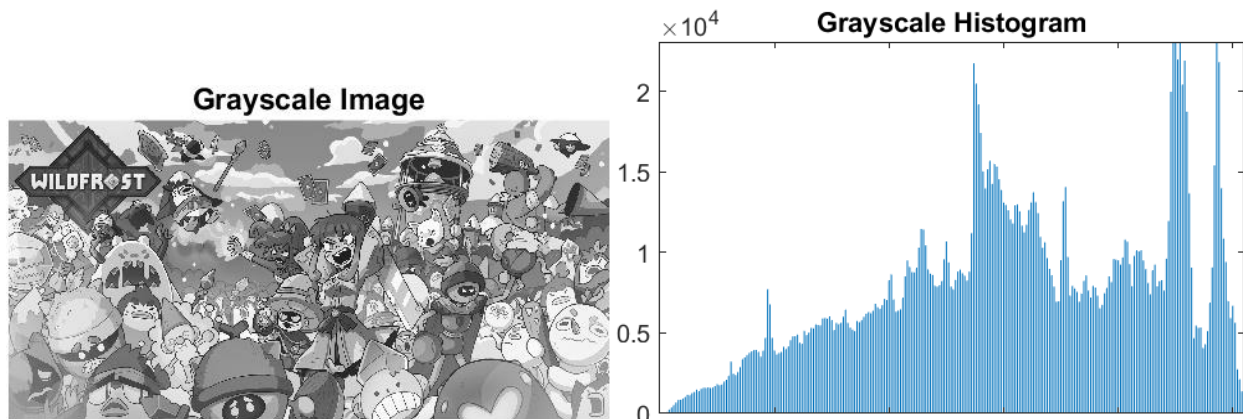
figure("Name", "Histogram - Robert Antonius", "WindowState", "maximized");
figure_n = 3; figure_m = 4;

subplot(figure_n,figure_m, 1), imshow(original_image), title("RGB Image");
subplot(figure_n,figure_m, 5), imshow(gray_image), title("Grayscale Image");

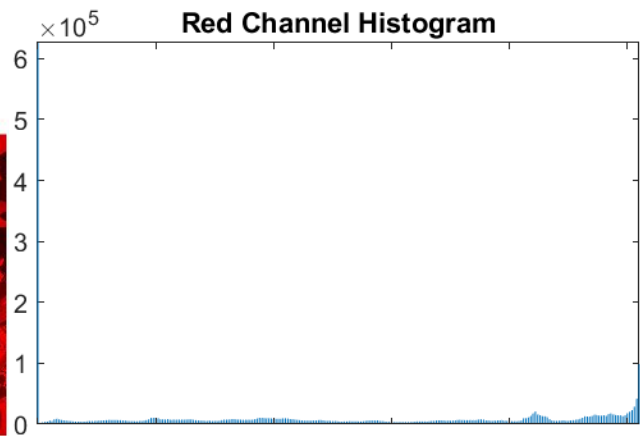
subplot(figure_n,figure_m, 3), imshow(red_image), title("Red Channel Image");
subplot(figure_n,figure_m, 7), imshow(green_image), title("Green Channel Image");
subplot(figure_n,figure_m,11), imshow(blue_image), title("Blue Channel Image");

subplot(figure_n,figure_m,2), imhist(original_image), title("RGB Histogram");
subplot(figure_n,figure_m,6), imhist(gray_image), title("Grayscale Histogram");

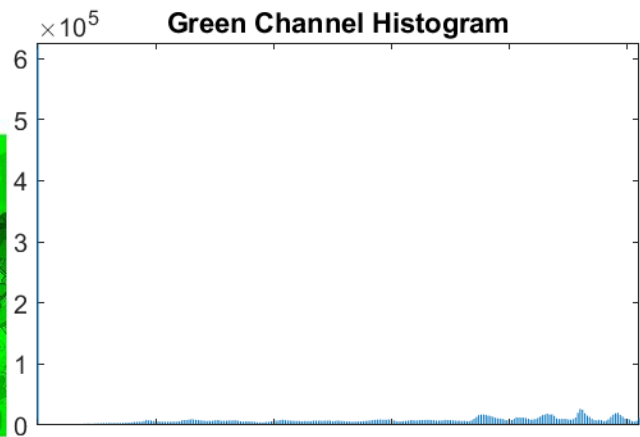
subplot(figure_n,figure_m, 4), imhist(red_image), title("Red Channel Histogram");
subplot(figure_n,figure_m, 8), imhist(green_image), title("Green Channel Histogram");
subplot(figure_n,figure_m,12), imhist(blue_image), title("Blue Channel Histogram");
```



Red Channel Image



Green Channel Image



Blue Channel Image

