**Robert Antonius – 2125250057**

**Perbaikan 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");











