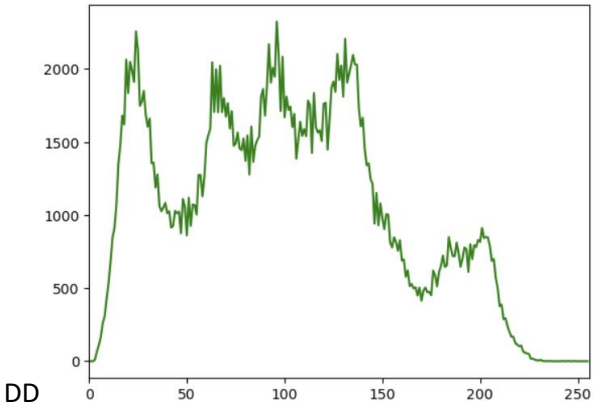
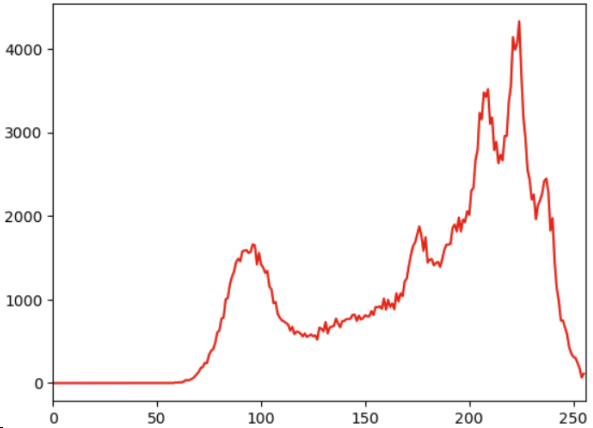
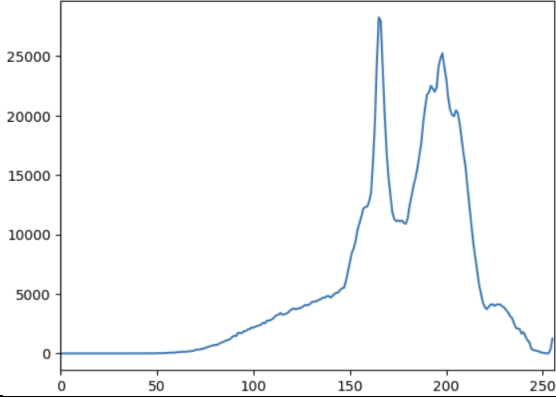


## Task 1.2C Answer sheet

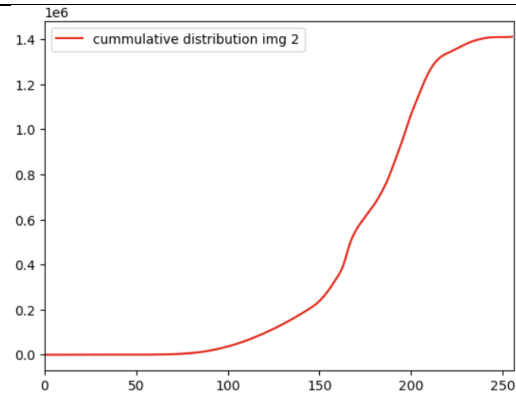
Fill in the “**Results**” column with relevant results

### Notes:

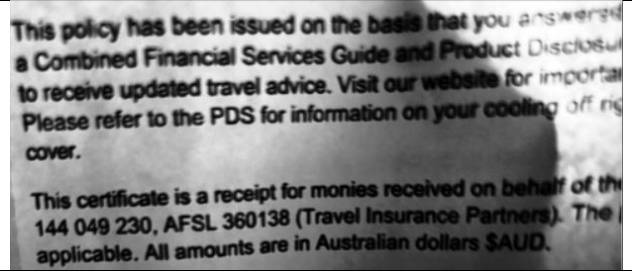
- Examples are given for illustration purposes only and need to be replaced by your own results.
- Missing any required results will result in a re-submission.

Results	
Histogram of the green channel of Lenna.png	 <p>DD</p>
Histogram of the red channel of Lenna.png	
Intensity histogram of img_gray for img2.jpg (i.e., intensity histogram of input image)	

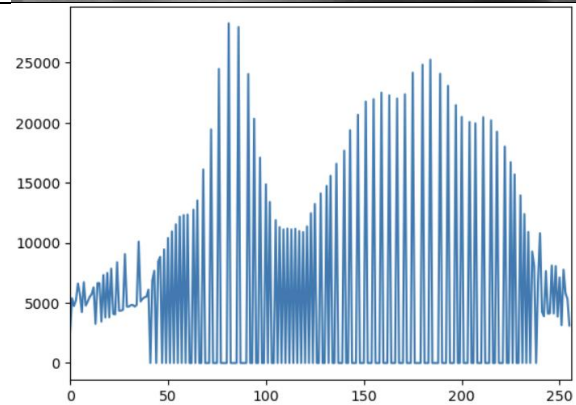
Cumulative intensity distribution of  
img\_gray for img2.jpg



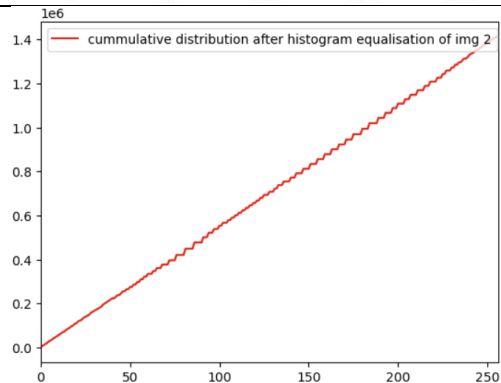
Result of histogram equalisation (i.e.,  
img\_equ) for img2.jpg



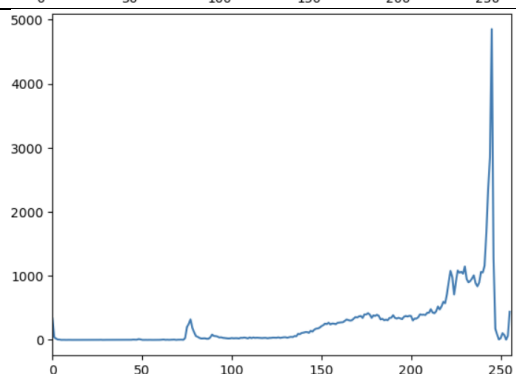
Intensity histogram of img\_equ for  
img2.jpg (i.e., intensity histogram of output  
image)

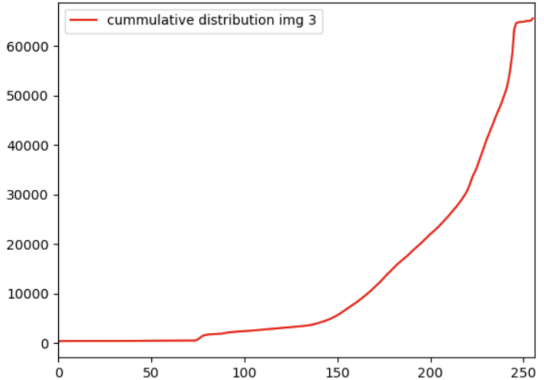

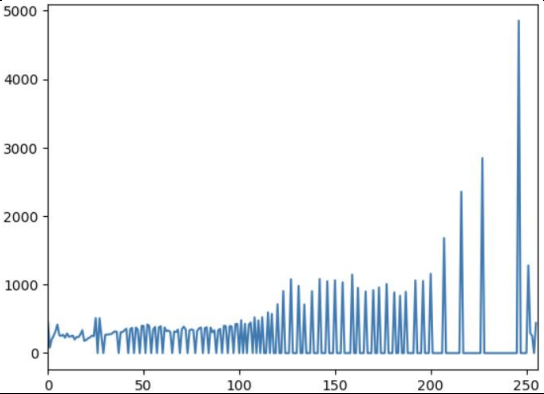
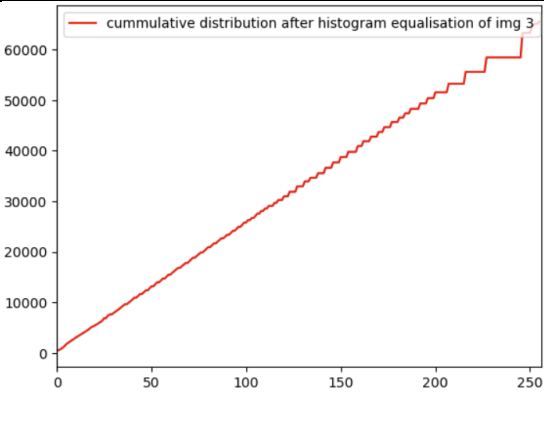


Cumulative intensity distribution of  
img\_equ for img2.jpg



Intensity histogram of img\_gray for  
img3.jpg (i.e., intensity histogram of input  
image)



Cumulative intensity distribution of img_gray for img3.jpg	 <p>A line graph showing the cumulative intensity distribution of the original grayscale image (img3.jpg). The x-axis represents intensity values from 0 to 255, and the y-axis represents the cumulative count from 0 to 60,000. The curve is red and remains near zero until approximately intensity 100, then rises steeply to reach 60,000 at intensity 255. The legend indicates 'cummulative distribution img 3'.</p>
Result of histogram equalisation (i.e., img_equ) for img3.jpg	 <p>A grayscale X-ray image showing a human torso. The image has been processed with histogram equalization, resulting in enhanced contrast, particularly in the lower half of the image where the pelvic region is now much brighter and more detailed.</p>
Intensity histogram of img_equ for img3.jpg (i.e., intensity histogram of output image)	 <p>A bar chart representing the intensity histogram of the equalized image. The x-axis shows intensity values from 0 to 255, and the y-axis shows frequency from 0 to 5,000. The distribution is relatively uniform across the range, with a slight increase in frequency towards the higher intensity values (above 200). The bars are blue.</p>
Cumulative intensity distribution of img_equ for img3.jpg	 <p>A line graph showing the cumulative intensity distribution of the equalized image. The x-axis represents intensity values from 0 to 255, and the y-axis represents the cumulative count from 0 to 60,000. The curve is red and follows a nearly straight diagonal line from (0,0) to (255,60,000), indicating a uniform distribution of intensities. The legend indicates 'cummulative distribution after histogram equalisation of img 3'.</p>
$\chi^2$ -distance between img_gray and img_equ for img2.jpg	1806031.2
KL-divergence between img_gray and img_equ for img2.jpg	29.001324
$\chi^2$ -distance between img_gray and img_equ for img3.jpg	97802.65

KL-divergence between img_gray and img_equ for img3.jpg	29.612656
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