**Local Histogram Analysis**

This exercise will help students understand various aspects of image histogram processing.

Q1: Consider the image given below. Perform Global histogram equalization to enhance this image. Save and show the original histogram and the processed histogram along with the input and resulting images.

https://faculty.cs.byu.edu/~farrell/cs450/mystery.png

Q2: Perform the local histogram equalization of the same image by using

1. Tiling approach: at least four tiles. Save and show the original histograms and the processed histogram from each tile, along with the final complete image.
2. By sliding window approach: displacement by one pixel size in each iteration. Save and show the original histograms and the processed histograms, along with the final complete image.

Q3: What artifacts/ effects are observed when applying equalization at different levels in an image?

Please make sure that you submit the following contents:-

**Deliverable**

Please make sure that you submit the following contents:-

Either a report or a jupyter notebook containing code and output images