**Requirements for the first project :**

**Topic:** Image Enhancement (10 points)

**Scoring criteria of the project:**

1. The content of the report;

2. The method used;

3. The effect of enhancement.

(The three rankings are in no particular order, with the same proportion)

**Project Details**

1. Histogram Equalization

Each person is assigned 1 image to be processed. Everyone should first analyze the distribution of grey levels in the image and utilize the method of Histogram Equalization to enhance the image.

1. Spatial filtering

Each person is assigned 3 images to be processed. Everyone should first analyze the noise types in the images and utilize the appropriate Denoising methods.

**Evaluation of image enhancement:**

1. Intuitive visual comparison; (2) PSNR

is the maximum value representing the gray level of the image point. If each sampling point is represented by 8, it is 255.

Two m × n monochrome images I(input image) and K(enhanced image)

**Requirements for report:**

1. Write in English. There is no word limit for the report.

2. It is necessary to reflect the analysis process, provide the specific implementation steps, and analyze the experimental results.

**Requirements for submitting:**

1.Need to include code, report and picture after denoising.

2. It is not allowed to implement the core steps by calling related packages for image processing.

3. Name the report and folder in the form of "student number + name" and submit the compressed package in zip or rar format.

4. Deadline: 20, April, 2021.