### Week 1 Assignment 1

#### Due on 2018-06-25, 10:00 ET

**Instructions:**
- Use the following methods for image processing as your instructor has instructed.
- Proceed with the steps as instructed.

<table>
<thead>
<tr>
<th>Step 1: <strong>Assignment Overview</strong></th>
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</thead>
<tbody>
<tr>
<td><strong>Steps:</strong></td>
</tr>
<tr>
<td>1. Load the grayscale image.</td>
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<tr>
<td>2. Enhance the image using a sharpening filter.</td>
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<tr>
<td>3. Apply a thresholding technique.</td>
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</table>

**Announced Keywords:**
- Image Processing
- Image Enhancement
- Thresholding

**Your Task:**
- Output the enhanced image and annotate the regions of interest.

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**Step 2:**
- Write a program to implement the above steps in Python.

**Announced Keywords:**
- Python Programming
- Image Processing Libraries

**Your Task:**
- Provide a brief summary of your program.

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**Step 3:**
- Describe the effects of different filters on the image quality.

**Announced Keywords:**
- Image Filters
- Image Quality

**Your Task:**
- Create a comparison chart showing the effect of each filter.

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**Step 4:**
- Explain how you plan to improve the image quality in the future.

**Announced Keywords:**
- Image Improvement
- Future Work

**Your Task:**
- Discuss potential improvements and their implementation.

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**Step 5:**
- Submit the program code and the enhanced image.

**Announced Keywords:**
- Code Submission
- Image Submission

**Your Task:**
- Ensure all required files are uploaded.

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**Step 6:**
- Review the feedback provided.

**Announced Keywords:**
- Feedback Review
- Instructor Feedback

**Your Task:**
- Address any comments or suggestions provided by the instructor.