

**Department of Computer Science and Engineering**  
**National Institute of Technology, Hamirpur**

**Digital Image Processing CS-325**

**Laboratory Assignment -1**

**Topic: Spatial Image Enhancement functions and interpretation of results**

1. Design a program to read a bmp file and do the intensity averaging, inversion, sub-sampling. Write the conclusion based on the observation of the output image
2. Design a program to read a bmp and pgm file and do the following enhancement operations in spatial domain:
  - a) Contrast stretching
  - b) Log Transform and find its effect on the Dynamic range and visual clarity of the image.
  - c) Power-Law (Gamma) Transforms and find its effect on the Dynamic range and visual clarity of the image.

Note: The list of images are given along with this assignment.