1. Image Enhancement and Filter in Spatial Domain
   1. Basic Gray Level Transformations
      1. Point operations,
      2. Contrast stretching,
      3. clipping and thresholding,
      4. digital negative,
      5. intensity level slicing,
      6. log transformation,
      7. power log transformation,
      8. bit plane slicing
   2. Histogram Processing
      1. Histogram
      2. Unnormalized and Normalized Histogram,
      3. Histogram Equalization,
   3. Spatial operations
      1. Linear filters,
         1. Spatial Low pass smoothing filters,
         2. Averaging,
         3. Weighted Averaging,
      2. Non-Linear filters
         1. Median filter,
         2. Maximum and Minimum filters,
         3. High pass sharpening filters,
         4. High boost filter,
         5. high frequency emphasis filter,
         6. Gradient based filters,
         7. Robert Cross Gradient Operators,
         8. Prewitt filters,
         9. Sobel filters,
         10. Laplacian filters
   4. Magnification
      1. Magnification by replication
      2. Magnification by interpolation
2. Restoration Filters
   1. Mean Filters:
      1. Arithmetic Mean Filters,
      2. Geometric Mean Filters,
      3. Harmonic Mean Filters and
      4. Contraharmonic Mean Filters
   2. Order Statistics Filters:
      1. Median filters,
      2. Min and Max filters,
      3. Midpoint filters and
      4. Alpha trimmed mean filters
   3. Band pass and Band Reject filters:
      1. Ideal filters,
      2. Butterworth filters and
      3. Gaussian Band pass filters
3. Morphological Image Processing
   1. Dilation
   2. Erosion
   3. Opening
   4. Closing
4. Image Segmentation
   1. Discontinuity Based Techniques
      1. Point Detection,
      2. Line Detection,
      3. Edge Detection using Gradient and Laplacian Filters,
      4. Edge Detection using Laplacian Filters,
      5. Mexican Hat Filters,
      6. Hough Transform
   2. Similarity based techniques Thresholding:
      1. Global,
      2. Local and
      3. Adaptive
   3. Region Based Segmentation:
      1. Region Growing Algorithm,
      2. Region Split and Merge Algorithm

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| **S.N.** | **Lab Title** | **Signature** | **Remarks** |
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