

IIVP Lab Practice Experiments

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**Topic Covered in the previous class:** Image Segmentation, Color image Processing, and Morphological Image Processing.

**Aim of this Practice Session:** *Image Compression (Huffman code, LZW encoding and decoding)*

1. Write a python program for Huffman Coding and consider a source with 7 messages having probability 0.25, 0.25, 0.125, 0.125, 0.125, 0.0625, 0.0625. Find average code length, entropy, and efficiency.
2. Write a python code to implement LZW Encoding and Decoding techniques. Consider message the string “ababbabababba” and apply LZW encoding, after the apply LZW decoding to get back to the original input message string.