ECE160 Assignment 6
Due: In class, 3:30p.m. May 17

1. The JPEG image compression algorithm uses a combination of:
   Encoding to separate Luminance and Chrominance
   Discrete Cosine Transformation
   Quantization
   Zigzag Ordering
   Run length coding
   Entropy coding.

   Explain how these techniques work together and how each
   of the techniques is necessary for the others to be effective.

2. The logarithmic motion vector search method depends on a form
   of linearity in the image to be effective. Explain why the algorithm
   requires that linearity and justify the assumption for typical images.
   Suggest a kind of image for which the assumption is not justified and
   for which the algorithm might fail.

   Does the hierarchical motion vector search algorithm depend on a similar
   assumption? Can you suggest a kind of image for which the hierarchical
   algorithm might fail?