Huffman coding is optimum in terms of minimum average word length for a given entropy. Thus Huffman coding yields a code with the highest efficiency \( \frac{H(X)}{L} \).

4. Order message word in decreasing prob.

2. Combine the two source message having lowest prob.

3. Assign upper message a "0" and lower one "1".

4. The combination is effectively a composite message having a higher probability and is placed as a new message into the list.

5. Repeat this process for the next lowest prob. pair.

6. Trace back through graph to the message to get the code sequence or code word.