

Practice Assignment (PA) 4

1. Calculate the entropy of the following stream of symbols.

BABAAHDAAAAAABBLOOOH

2. Find the code of each symbol in order to encode the following stream using Huffman Coding:

BABAAHDAAAAAABBLOOOH

- i. Calculate the number of bits required to encode the stream before compression.
  - ii. Calculate the number of bits required to encode the stream after compression.
  - iii. Calculate the compression ratio.
3. Find the code of each symbol in order to encode the following stream using Shannon-Fano Algorithm:

BABAAHDAAAAAABBLOOOH

- i. Calculate the number of bits required to encode the stream after compression.
- ii. Calculate the compression ratio.

Instructions:

1. You should upload this PA in Sejong University Blackboard after you log-in with your ID
2. Upload either PDF or Microsoft word document.
3. Only a single file should be uploaded
4. Student name and student number should be clearly written on the top of the uploaded document.
5. Deadline: October 31, 2017 (Tuesday).