CS 2124: Data Structures Spring 2024

Name: Ian Rohan (usm404)

1. Huffman code/bit representation Table of your name

a. Fix bit representation

Character	Frequency	Code
"l"	1	00
"A"	1	10
"N"	1	11

2 + 2 + 2 = 6 bits in total.

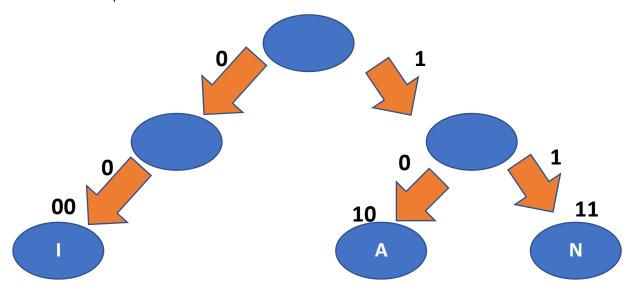
b. Variable bit representation

Character	Frequency	Code
" "	1	0
"A"	1	10
"N"	1	11

1 + 2 + 2 = 5 bits in total.

2. Huffman tree of your name

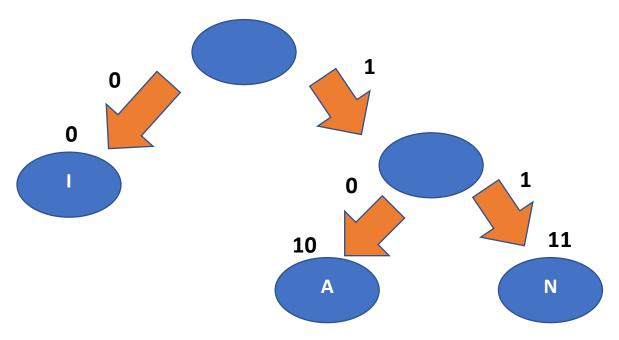
a. Fix Bit representation



b. Variable bit representation

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c. The variable bit representation is more bit efficient for encoding.