

1. Huffman code/bit representation Table of your name

a. Fix bit representation

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

$2 + 2 + 2 = 6$ bits in total.

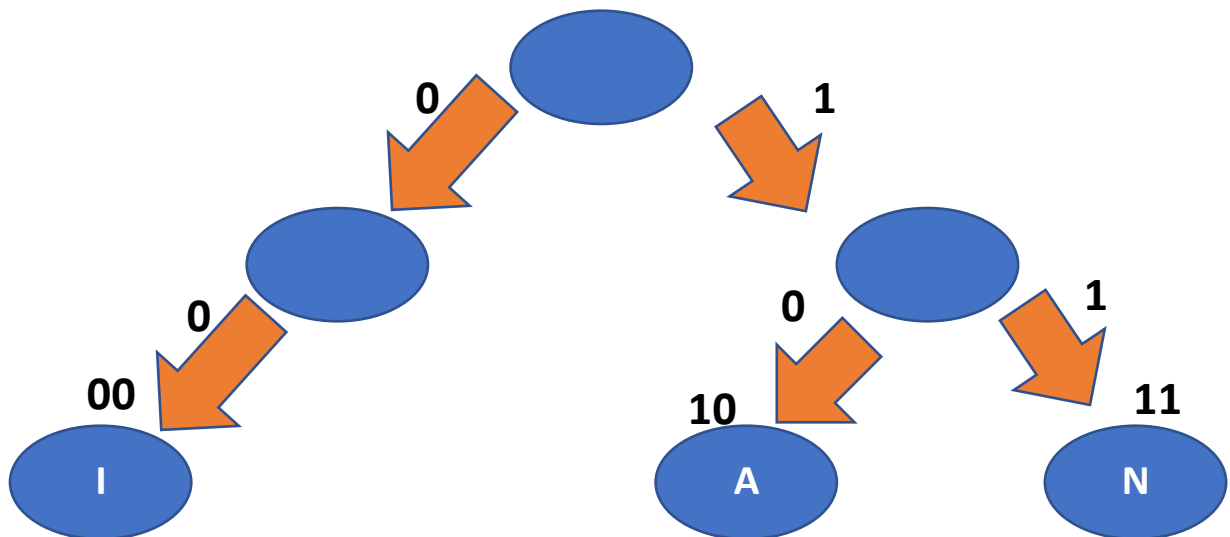
b. Variable bit representation

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

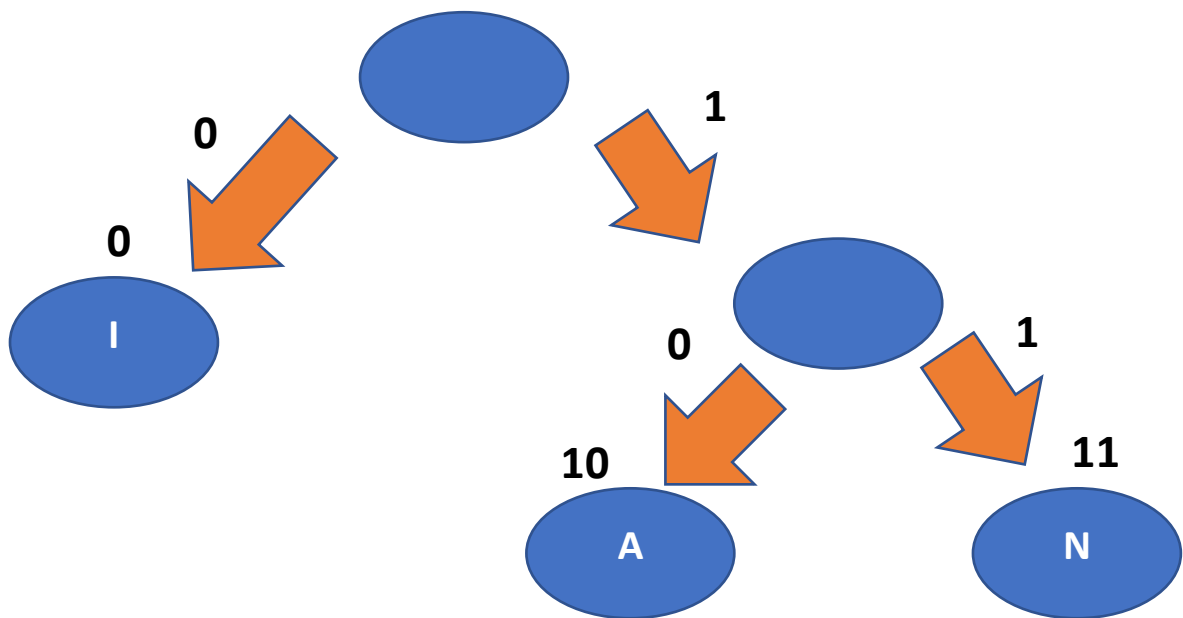
$1 + 2 + 2 = 5$ bits in total.

2. Huffman tree of your name

a. Fix Bit representation



b. Variable bit representation



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