Inteligência Artificial (L9027) 2021/2022

Huffman Coding with patterns

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1 Introduction

Huffman Coding is an algorithm consisting in the contruction

2 Assumptions

We will be assuming that a text character is stored in 1 byte (8 bits), giving us a total of possible different byte values of 256

$$2^8 = 256 \tag{1}$$

let **c** be our character in decimal value:

$$\mathbf{c} \in \mathbb{R} : \{0 \leq C \leq 255\} \tag{2}$$

my rule number 1, unlike ukkonens we have to keep track of the substring range, to do this I have created an extra rule on the ukkonens algorythm, basically, if our curent range is bigger in lenght than the range that is originally on this node we will have to split the node immediatly to account for repetition