Immagine che contiene testo, emblema, simbolo

Descrizione generata automaticamente

Homework 4 – Lossless Compression

Mobile Programming and Multimedia

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*Encode the string:*

*abcabcabcabcffffffffffff000000000000ffffffffffffffffffffffff*

*using:*

1. *the LZW algorithm and*
2. *choose an algorithm between Shannon-Fano and Huffman.*

*Compare the two results in terms of compression ratio.*

Solution

Let’s first start considering the LZW algorithm on the string given:

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