# A REVIEW OF LOSSLESS DATA COMPRESSION ALGORITHMS

#### A PREPRINT

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#### **ABSTRACT**

# **Objective**

This work aims to provide an introduction to the domain of Data Compression in Information Theory and a review of the existing literature in the field of Algorithms for Lossless Data Compression. We identify and discuss the potential opportunities, barriers and the future scope of the field. We also review data compression methods used for image and audio data.

### Methods

Here we have to explain the methodology we used to write this article. Like how many papers we reviewed and all that.

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## Results

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Keywords Data Compression · Algorithms · Lossless Compression · Information Theory

- 1 Introduction
- 2 Prefix Codes
- 3 Shanon Coding
- 4 Huffman Coding
- 5 Lempel-Ziv(lz) Compression Methods
- 6 Run Length Coding
- 7 Prediction by Partial Matching
- 8 Arithmetic Coding
- 9 Deflate
- 10 Grammar Based Compression
- 11 Current Research Work
- 12 Future Scope
- 13 Conclusion

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