**Huffman Coding**

**Team Members:**

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**Abstract:**

In this C++ project we’ve implemented Heaps , Maps and Vectors to provide Huffman encoding to transferable data. Huffman coding is a lossless data compression algorithm. The idea is to assign variable-length codes to input characters, lengths of the assigned codes are based on the frequencies of corresponding characters. The most frequent character gets the smallest code and the least frequent character gets the largest code.

**Data Structures Used:**

* Heaps
* Maps

**Algorithms Used:**

* Huffman Encoding

**Team Members and their Contributions:**

1. **S.Gautham :**Designing main screen and implementing the algorithm to give the best encoded message.
2. **Mohammed Thabrez :** Integration between user and heap and decoding
3. **Manish :** Creation and building of the heap and encoding.