**Huffman Compression Program**

**Overview**

This program demonstrates the implementation of the Huffman Coding Algorithm in C for compressing text data without losing any information. It accepts a user-provided input string, calculates the original size of the data in bits, compresses it using Huffman encoding, and outputs the compressed size in bits.

**Features**

* Prompts the user to input text.
* Calculates and displays the original size of the text in bits.
* Compresses the text using Huffman coding.
* Displays the compressed size of the text in bits.

**Requirements**

* A C compiler (e.g., GCC).
* Basic knowledge of compiling and running C programs.

**File Structure**

* **huffman\_compression.c**: The main C source code implementing Huffman coding.

**Compilation and Execution**

1. Save the program in a file named huffman\_compression.c.
2. Compile the program using the GCC compiler:

gcc huffman\_compression.c -o huffman\_compression

1. Run the program:

./huffman\_compression

**Example Usage**

**Input:**

Enter text to compress: aaaaabbbbcccdde

**Output:**

Original size: 120 bits

Compressed size: 42 bits