

```
#include <iostream>
#include <string>
#include <fstream>
#include "HuffmanCode.h"
#include <cassert>
using namespace std;

// Returns size of the file
off_t fsize(const char *filename);

int main(){

    // Opens the text file containing the poem "The Raven", and
    // associates it to the variable 'poem'
    ifstream poem ("Raven.txt");

    // Constructs a string variable by copying each character
    // from the poem using 'istreambuf_iterator'
    std::string content( (std::istreambuf_iterator<char>(poem) ),
                        (std::istreambuf_iterator<char>() ) );

    // Constructs a HuffmanCode object with string type argument 'content'.
    // Pointer 'test' points to the object in the heap.
    HuffmanCode* test = new HuffmanCode(content);

    // Command to display the table
    test->printHuffmanTrie();

    // Print to encoded file
    // Open a file to print the compressed binary information
    fstream compressed("Compressed_Raven.bin");
    compressed <<*(test->printEncoded());

    cout << "\n";
    cout << "Size of the original file (Bytes) : " << poem.tellg() << endl;

    compressed.seekg(0, ios::end);
    cout << "Size of the encoded file (Bytes) : " << compressed.tellg() << endl;

    // Close fstream files
    compressed.close();
    poem.close();
    // Deletes the HuffmanCode object from the heap memory.
    delete test;

    return EXIT_SUCCESS;
}
```