Assign02

Due: 09–Feb–2020 11:55 p.m.

Background

In this assignment, we will prepare our payload or the data to be covertly communicated. In future assignments, we will embed this payload in an image carrier, specifically a BMP file. The payload we will use is the text of the Declaration of Independence. A file containing the text will be provided on Blackboard.

Goal

The goal of this assignment is to convert the text in this file into a corresponding series of bits. The output will be a file containing the ASCII representation of the bits. For example, if you read in an "A", then the output should be `01000001`.

Deliverables

1. A working program or script with an explanation of how you solved the problem.
2. The output file containing the corresponding series of bits. This file should consist of one line of output. No formatting is required.
3. Answers to the following questions:
    a. What size (in bytes) is the input file?
    b. What size (in bytes) is the output file?
    c. Based on the size (in bytes) of the input file and your conversion process, what size (in bytes) should the output file be?

Notes

To help you, here are the first and last 20 bits of the output: `01001001010011100010 ...11110111001000101110`