INFSCI 2500
Homework 6

```
Enter a message to encode >
hello world

Huffman codes for this message:
  1100
d 1111
e 011
h 010
l 10
o 00
r 1110
w 1101

Encoded message: 0100111010001100110100111010111
Fixed-width encoding of this message would require 88 bits.
After Huffman encoding, the message takes up 32 bits, a savings of 63.64%
```

```
Enter a message to encode >
the quick fox jumps over the lazy brown dog

Huffman codes for this message:
  00
a 111010
b 101101
c 01001
d 111111
e 1010
f 01111
g 10001
h 10111
i 01100
j 101100
k 111100
l 01110
m 01010
n 01011
o 1100
p 110110
q 110111
r 11010
s 01101
t 11100
u 1001
v 111110
w 111101
x 10000
y 01000
z 111011

Encoded message: 1110010111101000110111100101100010011111000001111110010000001011001001010101101100110100110011111010101101000111001011110100001110111010111011010000010110111010110011110101010011001111111110010001
Fixed-width encoding of this message would require 344 bits.
After Huffman encoding, the message takes up 192 bits, a savings of 44.19%
```