\*\*\*HuffSall Encoding Program\*\*\*

Please enter a sentence to encode and press enter:

This sentence contains three a's, three c's, two d's, twenty-six e's, five f's, three g's, eight h's, thirteen i's, two l's, sixteen n's, nine o's, six r's, twenty-seven s's, twenty-two t's, two u's, five v's, eight w's, four x's, five y's, and only one z.

Total Characters: 256

Unique Characters: 20

SYMBOL FREQ. DEPTH TOTAL HUFFMAN CODE

'x' 4 5 20 00000

'l' 2 6 12 000010

'u' 2 6 12 000011

'h' 8 4 32 0001

'n' 16 3 48 001

'w' 8 4 32 0100

'o' 9 4 36 0101

'v' 5 5 25 01100

'f' 5 5 25 01101

'y' 5 5 25 01110

'g' 3 6 18 011110

'a' 3 6 18 011111

't' 22 3 66 100

'c' 3 6 18 101000

'z' 1 7 7 1010010

'd' 2 7 14 1010011

'r' 6 5 30 10101

'i' 13 4 52 1011

'e' 26 3 78 110

's' 27 3 81 111

\*\*\*\*\* TREE \*\*\*\*\*

| | |-------'s':27

| |-------53

| | |-------'e':26

|-------100

| | | |-------'i':13

| | |-------25

| | | | |-------'r':6

| | | |-------12

| | | | | | |-------'d':2

| | | | | |-------3

| | | | | | |-------'z':1

| | | | |-------6

| | | | | |-------'c':3

| |-------47

| | |-------'t':22

170

| | | | | |-------'a':3

| | | | |-------6

| | | | | |-------'g':3

| | | |-------11

| | | | |-------'y':5

| | |-------21

| | | | |-------'f':5

| | | |-------10

| | | | |-------'v':5

| |-------38

| | | |-------'o':9

| | |-------17

| | | |-------'w':8

|-------70

| | |-------'n':16

| |-------32

| | | |-------'h':8

| | |-------16

| | | | | |-------'u':2

| | | | |-------4

| | | | | |-------'l':2

| | | |-------8

| | | | |-------'x':4

\*\*\*\*\* TREE STRUCT \*\*\*\*\*

tree(root(170),tree(root(70),tree(root(32),tree(root(16),tree(root(8),leaf('x':4),tree(root(4),leaf('l':2),leaf('u':2),leaf('h':8),leaf('n':16)),tree(root(38),tree(root(17),leaf('w':8),leaf('o':9)),tree(root(21),tree(root(10),leaf('v':5),leaf('f':5)),tree(root(11),leaf('y':5),tree(root(6),leaf('g':3),leaf('a':3)))))),tree(root(100),tree(root(47),leaf('t':22),tree(root(25),tree(root(12),tree(root(6),leaf('c':3),tree(root(3),leaf('z':1),leaf('d':2),leaf('r':6),leaf('i':13))),tree(root(53),leaf('e':26),leaf('s':27))))