

Sample Test Cases - Team 20

Input 1: UUUCCC

Compression ->

RLE:

3U3C RLE

48 before compression

32 after compression

0.3333333333 save percentage

LZW:

[85,256,67,258]

48 before compression

10 after compression

0.7916666666666666 save percentage

Huffman Encoding:

111000 Huffman Coding

48 before compression

6 after compression

0.875 save percentage

Decompression ->

RLE input: 3U3C RLE

O/P - UUUCCC RLE

LZW input: [85, 256, 67, 258]

O/P - UUUCCC LZW

Huffman Decoding input: 111000 Huffman Coding

O/P - UUUCCC Huffman Decoding

Input 2:

AUGUUUCUCACUCAGAAAGAUCGUCGGGGUACGUCUUCGCAUAAGGAC
GGGCCAUAUUGGUAG

Compression ->

RLE:

1A1U1G3U1C1U1C1A1C1U1C1A1G3A1G1A1U1C1G1U1C4G1U1A1C1G1U1C2U1C1G1C1A1U2A2G1A1C3
G2C1A1U1A2U2G1U1A1G RLE

504 before compression

768 after compression

-0.52380 save percentage

LZW:

[65, 85, 71, 85, 259, 67, 85, 67, 65, 261, 263, 71, 65, 268, 267, 262, 258, 67, 71, 274, 258, 264, 272, 260,
71, 263, 85, 269, 267, 273, 274, 67, 281, 256, 257, 276, 71]

504 before compression

95 after compression

0.81150793 save percentage

Huffman Encoding:

10010001010111011110110111100010101000100111000111000000000110110001110101110011100
1101000001011000000111110011001010000011000 Huffman Coding

504 before compression

126 after compression

0.75 save percentage

Decompression ->

RLE input:

1A1U1G3U1C1U1C1A1C1U1C1A1G3A1G1A1U1C1G1U1C4G1U1A1C1G1U1C2U1C1G1C1A1U2A2G1A1C3
G2C1A1U1A2U2G1U1A1G RLE

O/P - AUGUUUCUCACUCAGAAAGAUCGUCGGGGUACGUCUUCGCAUAAGGACGGGCCAUAUUGGUAG RLE

LZW input: [65, 85, 71, 85, 259, 67, 85, 67, 65, 261, 263, 71, 65, 268, 267, 262, 258, 67, 71, 274, 258,
264, 272, 260, 71, 263, 85, 269, 267, 273, 274, 67, 281, 256, 257, 276, 71]

O/P - AUGUUUCUCACUCAGAAAGAUCGUCGGGGUACGUCUUCGCAUAAGGACGGGCCAUAUUGGUAG LZW

Huffman Decoding input:

1001000101011101111011011100010101000100111000111000000000110110001110101110011100
1101000001011000000111110011001010000011000 Huffman Coding

O/P - AUGUUUCUCACUCAGAAAGAUCGUCGGGGUACGUCUUCGCAUAAGGACGGGCCAUAUUGGUAG
Huffman Decoding