Part1

lena

Entropy = 7.44551

Total number bits =1.95179e+06

baboon

Entropy = 7.47443

Total number bits =1.95938e+06

Part2

lenaerrdiff

Run-Length Entropy is 1.35375.

The total number of runs is 159928.

The total number of bits requires is 216503 bits.

The number of bits per pixel requires is 0.825894 bits.

Weaskedforit

Run-Length Entropy is 5.17333.

The total number of runs is 10224.

The total number of bits requires is 52892.2 bits.

The number of bits per pixel requires is 0.201768 bits.

Part3

lena\_bit0

Run-Length Entropy is 2.01304.

The total number of runs is 130213.

The total number of bits requires is 262124 bits.

The number of bits per pixel requires is 0.999924 bits.

lena\_bit1

Run-Length Entropy is 2.00557.

The total number of runs is 130700.

The total number of bits requires is 262129 bits.

The number of bits per pixel requires is 0.999941 bits.

lena\_bit2

Run-Length Entropy is 2.05428.

The total number of runs is 127513.

The total number of bits requires is 261948 bits.

The number of bits per pixel requires is 0.999252 bits.

lena\_bit3

Run-Length Entropy is 2.34021.

The total number of runs is 107857.

The total number of bits requires is 252408 bits.

The number of bits per pixel requires is 0.962861 bits.

lena\_bit4

Run-Length Entropy is 2.81322.

The total number of runs is 77499.

The total number of bits requires is 218022 bits.

The number of bits per pixel requires is 0.831688 bits.

lena\_bit5

Run-Length Entropy is 3.49383.

The total number of runs is 45668.

The total number of bits requires is 159556 bits.

The number of bits per pixel requires is 0.608659 bits.

lena\_bit6

Run-Length Entropy is 4.08881.

The total number of runs is 28387.

The total number of bits requires is 116069 bits.

The number of bits per pixel requires is 0.442768 bits.

lena\_bit7

Run-Length Entropy is 5.0021.

The total number of runs is 13926.

The total number of bits requires is 69659.3 bits.

The number of bits per pixel requires is 0.265729 bits.

Part4

lena

Prediction Error Entropy is 5.055.

Prediction Error Entropy is 1.32513e+06.

Baboon

Prediction Error Entropy is 6.54797.

Prediction Error Entropy is 1.71651e+06.