sievenna Testing

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sievenna's Huffman coding has been tested on the Large Text Compression Benchmark [2] as well as an uncompressed tarball of the standard Calgary corpus [1].

Image compression benchmark used was an 8-bit RGB photograph called nightshot_iso_100 from image compression.info [3].

References

- [1] Timothy Bell, Ian H Witten, and John G Cleary. Modeling for text compression. **ACM** Computing Surveys (CSUR), 21(4):557–591, 1989.
- [2] Matt Mahoney. Large text compression benchmark, 2011.
- [3] Rawzor. The new test images. http://imagecompression.info/test_images/, 2008. Accessed 26.12.2017.

File	Size	Compressed	Ratio	Comp. Time	Decomp. Time
nightshot_iso_100.ppm	$22.128~\mathrm{MB}$	17.843427 MB	1.240	$2.654 \mathrm{\ s}$	1.989 s
enwik8	100 MB	63.862	1.566	$9.100 \mathrm{\ s}$	$6.900 \mathrm{\ s}$
enwik9	$1000~\mathrm{MB}$	$648.370~\mathrm{MB}$	1.542	68 s	59 s
Calgary Corpus	$3.154~\mathrm{MB}$	$2.125~\mathrm{MB}$	1.484	$0.385 \mathrm{\ s}$	$0.321 \mathrm{\ s}$

Table 1: Performance statistics for Huffman coding. enwik8 and enwik9 are different sizes of the Large Text Compression Benchmark.