

Compression Ratio

The compression ratio measures how effectively a compression algorithm reduces size of data

It compares the original data size to compressed data size

$$\text{compression ratio} = \frac{\text{original data size}}{\text{compressed data size}}$$

Given

original data size = 100 KB

compressed data size = 40 KB

calculation

$$CR = \frac{100}{40}$$

$$CR = 2.5$$

$$\text{compression ratio} = 2.5:1$$

compressed algorithm has reduced the storage requirement significantly.