Lossy Compression	Lossless Compression
Many images hosted on the web are in a file format that uses lossy compression. This ensures the images load quickly and do not use too much bandwidth. **File size will reduce but clarity of image is look like blur image.**	An image treated with lossless compression should appear basically identical to the original, but should have a much smaller file size. While lossless compression can reduce image file sizes by as much as 40%, it is still less effective than lossy compression for reducing file size and optimizing images for the web.
Transform coding **is a lossy image compression algorithm that often uses a technique called discrete cosine transform (DCT), which is a way to mathematically represent a file using less information. JPEG relies on transform coding.**	**Run-length encoding (RLE)** is a lossless compression algorithm that encodes repeated pixels. For instance, if there are eight white pixels in a row, instead of writing out all eight pixels (like WWWWWWWW), it records the number of pixels (like 8W).
JPEG, WebP, HEIF, etc.	PNG, GIF, BMP, etc.

Lossy file formats.

There are a number of different 'lossy files'. Here are the main ones you might come across.

JPEG — This standard image file is the go-to choice for non-transparent online images.

MP3 — A standard audio file, often out of favour with the most discerning audiofiles due to lossy compression. Just like a compressed image, compressed audio can remove the ambience and richness from the original recording.

JPEG 2000 — This next-gen JPEG format offers flexibility between lossless and lossy compression. JPEG 2000 files allow users to save their files as the uncompressed RAW files, as well as sharable JPEGs.

WebP — Google introduced this file format to replace web mainstays like JPEG, PNG and GIF. WebP files support lossy and lossless compression.

TIFF — With their high resolutions, transparency and flexibility, TIFF files are a common file format for graphic design and high-resolution imagery. They offer creators a choice between lossy and lossless.