| **Sr. No.** | **Key** | **Lossy Compression** | **Lossless Compression** |
| --- | --- | --- | --- |
| 1 | Data Elimination | Lossy compression eliminates those bytes which are considered as not-noticable. | Lossless compression keeps even those bytes which are not-noticable. |
| 2 | Restoration | After lossy compression, a file cannot be restored to its original form. | After lossless compression, a file can be restored to its original form. |
| 3 | Quality | Lossy compression leads to compromise with quality. | No quality degradation happens in lossless compression. |
| 4 | Size | Lossy compression reduces the size of file to large extent. | Lossless compression reduces the size but less as compared to lossy compression. |
| 5 | Algorithm used | Transform coding, Discrete Cosine Transform, Discrete Wavelet transform, fractal compression etc. | Run length encoding, Lempel-Ziv-Welch, Huffman Coding, Arithmetic encoding etc. |
| 6 | Uses | Lossy compression is used to compress audio, video and images. | Lossless compression is used to compress text, images and sound. |
| 7 | Capacity | Lossy compression technique has high data holding capacity. | Lossless compression has low data holding capacity as compared to lossy compression. |