Data Encoding Formats

An encoding format is a standardized method for converting data into a specific format for efficient storage, transmission, and interpretation by computers. Encoding formats ensure that data can be processed and understood consistently across different systems and devices.

# Encoding Formats for Various Types of Data:

Text:

- UTF-8

- ASCII

- ISO/IEC 8859

- Unicode

Number:

- IEEE 754 (for floating-point numbers)

- Binary Coded Decimal (BCD)

- Two's Complement (for integers)

- Gray Code

Photo:

- JPEG (Joint Photographic Experts Group)

- PNG (Portable Network Graphics)

- GIF (Graphics Interchange Format)

- BMP (Bitmap)

- TIFF (Tagged Image File Format)

Audio:

- MP3 (MPEG-1 Audio Layer III)

- AAC (Advanced Audio Coding)

- WAV (Waveform Audio File Format)

- FLAC (Free Lossless Audio Codec)

- OGG (Ogg Vorbis)

Video:

- MP4 (MPEG-4 Part 14)

- AVI (Audio Video Interleave)

- MKV (Matroska Video)

- MOV (QuickTime Movie)

- WMV (Windows Media Video)