



What is an image?



 has value 0

 has value 255

$2^8 = 256$ different grey levels

Q: Why 2^8 grey levels?

↳ each pixel fits into a single unsigned byte

↳ the eye can distinguish only about $2^6 = 64$ levels of grey

... most decent cameras record > 8 bits/pixel

... this is for grey-scale (monochrome) images

Image file formats?

JPEG ——— BAD! Compression artefacts
 PNG ——— GOOD
 GIF ——— BAD! 256 colours
 BMP ——— Windows
 PSD ——— Photoshop
 TIFF ——— Easy to write, hard to read
 SVG ——— Vector format, not an image
 AVIF ——— ??

Video file formats? — all are compressed

MP4 = MPEG-4 — an international standard
 MKV ———
 AVI ——— Windows, but widely used: widely understood
 WEBM ———
 FLV ——— Flash
 MOV ——— QuickTime
 WMV ——— Windows