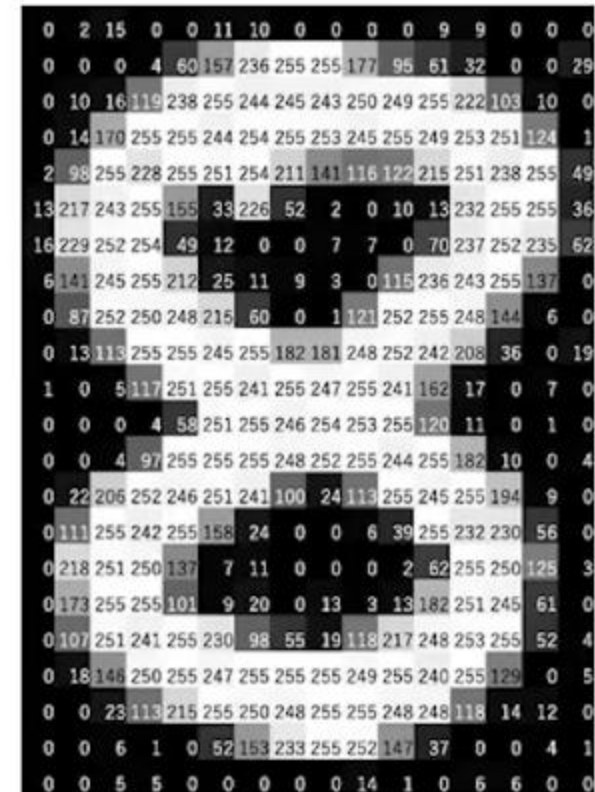


GrayScale Images

MUKESH KUMAR

- Images are stored in a computer as a matrix of numbers known as pixel values.
- These pixel values represent the intensity of each pixel.
- In grayscale images, a pixel value of 0 represents black, and 255 represents white.
- Anything between 0-255 is shade of gray

- For a grayscale images, the pixel value is a single number that represents the brightness of the pixel.
- The most common pixel format is the byte image, where this number is stored as an **8-bit integer** giving a range of possible values from 0 to 255
- Typically zero is taken to be black, and 255 is taken to be white



00000000 -> black
00000001 -> black with less darkness
00000010
 .
 .
 .
 .
11111111 -> white

} Other colors between black and white.

- grayscale images intended for visual display are commonly stored with 8 bits per pixel

Grayscale image pixel values

12	98	231	101	253	57	0	132
251	78	43	23	156	99	109	126
136	44	208	122	237	19	252	211
99	133	4	146	135	231	13	134
225	233	137	68	127	131	93	254
241	129	178	234	14	250	6	237
185	255	196	118	0	198	34	235
0	213	251	11	129	192	118	212

0	0	0	0	255	0	0	0
255	0	0	0	0	0	0	0
0	0	0	0	0	0	255	0
0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	255
0	0	0	0	0	255	0	0
0	255	0	0	0	0	0	0
0	0	255	0	0	0	0	0

0 2 15 0 0 11 10 0 0 0 0 9 9 0 0 0
0 0 0 4 60 157 236 255 255 177 95 61 32 0 0 25
0 10 16 119 238 255 244 245 243 250 249 255 222 103 10 0
0 14 170 255 255 244 254 255 253 245 255 249 253 251 124 1
2 98 255 228 255 251 254 211 141 116 122 215 251 238 255 45
13 217 243 255 155 33 226 52 2 0 10 13 232 255 255 36
16 229 252 254 49 12 0 0 7 7 0 70 237 252 235 62
6 141 245 255 212 25 11 9 0 0 115 236 243 255 137 0
0 87 252 250 248 215 60 0 1 121 252 255 248 144 6 0
0 13 113 255 255 245 255 182 181 248 252 242 208 55 0 15
1 0 5 117 251 255 241 255 247 255 241 162 17 0 7 0
0 0 0 4 58 251 255 246 254 253 255 120 11 0 1 0
0 0 4 97 255 255 255 248 252 255 244 255 182 10 0 4
0 22 206 252 246 251 241 100 24 113 255 245 255 194 9 0
0 111 255 242 255 158 24 0 0 6 39 255 232 230 56 0
0 218 251 250 137 7 11 0 0 0 2 62 255 250 125 3
0 173 255 255 101 9 20 0 13 3 13 182 251 245 61 0
0 107 251 241 255 230 98 55 19 118 217 248 253 255 52 4
0 18 146 250 255 247 255 255 255 249 255 240 255 129 0 5
0 0 23 113 215 255 250 248 255 255 248 248 118 14 12 0
0 0 6 1 0 52 153 233 255 252 147 37 0 0 4 1
0 0 5 5 0 0 0 0 0 14 1 0 6 6 0 0

0 2 15 0 0
0 0 0 4 60
0 10 16 119 238
0 14 170 255 255
2 98 255 228 255