

Worksheet: Edge Detection #2

Given a grayscale image, one simple way to find edges is to look at two neighboring pixels and take the difference between their values. If it's big, this means the colors are very different, so it's an edge.

Try it yourself! The grid below is filled with numbers that represent a grayscale image. See if you can detect edges the way a computer would do it. **If the values of two neighboring squares on the grid differ by more than 40, draw a thick line between them.**

255	255	255	255	255	255	255	255	255	255	255	255	255	255	255	255
255	80	80	255	255	255	255	255	255	255	255	255	255	80	80	255
255	90	90	80	255	255	255	255	255	255	255	255	80	85	85	255
255	90	90	80	255	255	255	255	255	255	255	80	80	85	85	255
255	90	90	90	80	255	255	255	255	255	255	80	85	85	80	255
255	90	90	90	80	255	255	255	255	255	80	80	85	85	80	255
255	90	90	90	80	80	20	80	80	20	80	80	85	85	90	255
255	255	90	90	80	80	20	80	80	20	80	80	85	85	255	255
255	255	90	90	80	80	85	80	80	85	80	80	85	90	255	255
255	80	90	20	20	20	90	85	85	90	20	20	20	80	90	255
255	80	80	62	0	62	90	85	85	90	62	0	62	85	90	255
255	90	85	62	0	62	62	85	85	80	62	0	62	85	90	255
255	90	85	85	62	85	85	85	85	80	85	62	85	85	90	255
255	255	85	85	90	90	10	10	10	10	85	85	85	85	90	255
255	255	85	85	85	85	10	40	40	10	85	85	85	85	255	255
255	255	85	85	85	85	85	10	10	85	85	85	85	85	255	255