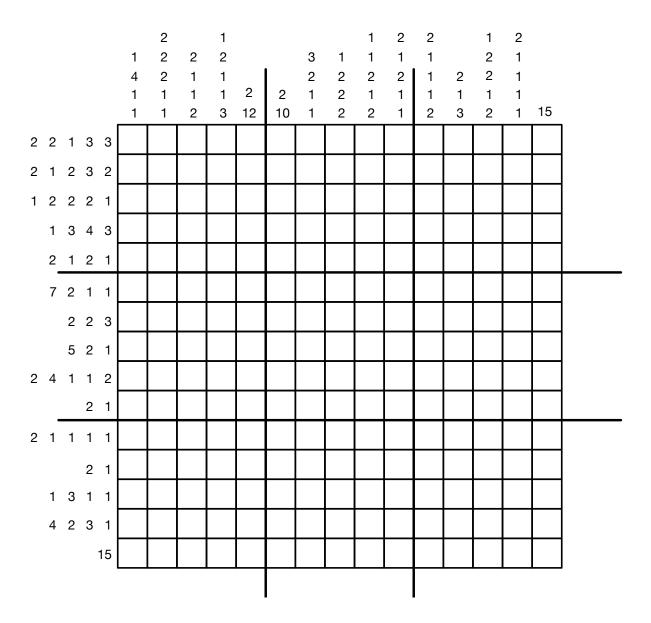## Compressed Pixel Puzzle 1

Computer Scientists care about the way images are represented. One way is as a grid of numbers: pixels. Each number indicates the colour of that square. This takes a lot of numbers and so can use a lot of memory. For sending images over networks we want to represent the information with as little data as possible. That is where compression comes in. Algorithms are used to represent the images with as few numbers as possible, but in a way that you can still get the original picture back. Other algorithms recover the original picture at the destination.

Compressed Pixel Puzzles turn it in to a logical thinking puzzle. Can you recover the original image from a reduced set of numbers? Here is one to try. The numbers on each row of the following puzzle tell you the number of cells in each group of black cells in the row. So if the numbers next to a row are 2,4,5 it means that row has a block of 2 black cells, a block of 4 black cells and a block of 5, in that order. Each block is separated by one or more white cells. White cells could also come before or after the blocks. Columns are encoded in the same way. Here is an autumn scene.

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