2048 probability model

TODO: 4 tile spawn rate varies between versions, needs to be encoded as a variable.

Movement algorithm:

left/right: For each row, start in the 2nd last column. Take the tile, and move it in the direction of the swipe until it hits another tile, if they have same value, then fuse them. Repeat for all rows.

Tiles cannot be fused consecutively

so 2 2 4 ← turns to 4, 4 not 8

but 2,2, 2,2 ← 4,4 because the 3rd to will hit the 4, so it is not consecutive.

Q: How much data do we need to store for each tile? Max tile value is 2^{N^2+1}
so in 2x2 would be 2^5, 3x3 : 2^{20}, 4x4: 2^{27}

Number of bits required is $\log_2(N^2+1)$