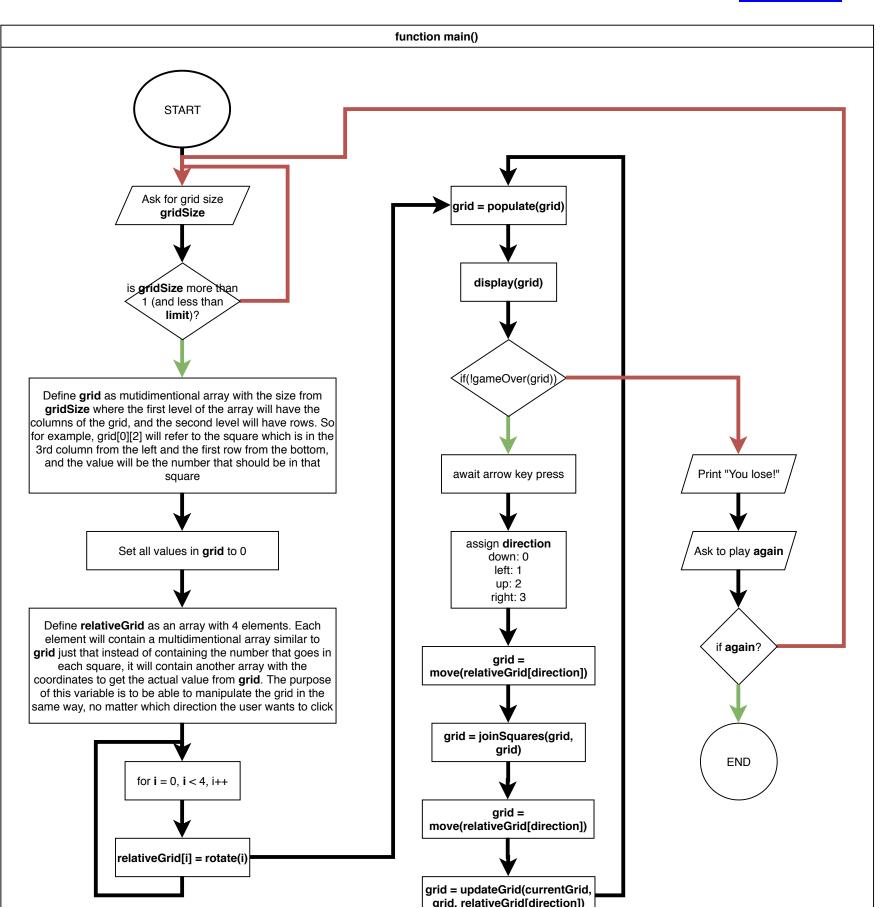
2048 Flowchart - Created with draw.io



function populate(grid)

stick some new squares into **grid** (according to rules of the game). returns **grid**

function display(grid)

Output the grid onto the terminal
(Possibly can detect size of terminal and acomodate the grid accordingly)
(Possibly use colours)

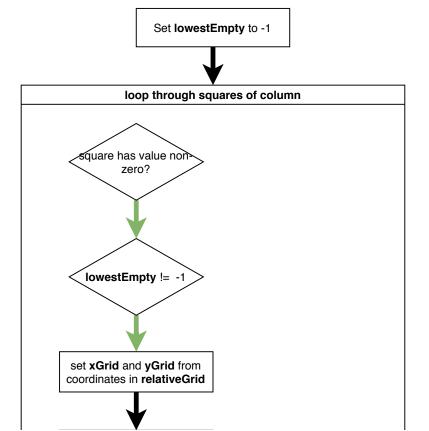
function joinSquares (currentGrid, grid)

joins squares when moved towards a sqare of the same value.
will do so by iterating through the squares from bottom to top (using relative coordinates provided by currentGrid), if square above is the same, square*=2 and square above=0, and write those new values into grid. return grid

function move(relativeGrid, grid, gridSize)

moves all squares as far as it can in the direction direction Will do so by swapping the values of every non-zero square in grid (starting from bottom) with that of the lowest zero square below it

Loop through columns of relativeGrid



function updateGrid (currentGrid, grid, relativeGrid)

uses coordinates from **currentGrid** to get values from **grid** and assign them to **newGrid** taking corresponding coordinates from **relativeGrid**.
returns **newGrid**

function gameOver(grid)

if empty squares in **grid**,
return false.
if any 2 adjacent squares in **grid** are the same, return
false.
return true

grid[xGrid][lowestEmpty] = grid[xGrid][yGrid] grid[xGrid][yGrid] = 0lowestEmpty++