Question: https://leetcode.com/problems/game-of-life/

So if we read the question carefully we will understand that if a cell is living (1) then it will continue to live there are if and only if 2 or 3 neighbouring alive cells, and a dead cell(0) will be alive in next generation if and only if it has exactly 3 alive neighbouring cells.

So then where is the problem so now the problem is we need to update the elements value in place.

So what I did was I decided to keep its upcoming generation’s value in 10’s place and present generation value in 1’s place.

So if the next generation lives then add 10 to the value of current generation value; else do nothing.

By which the potential values of each element will be 0(dead in both generation), 1(dead in upcoming generation but alive in current generation), 10(dead in current generation but would be alive in upcoming generation), and 11(alive in both generation).

And in order to get present generation value its modulo of 10 i.e., n=n%10, and to get next generation value we divide the value by 10 i.e., n=n/10.

Code:  
class Solution {

public void gameOfLife(int[][] board) {

int res[][] = new int[board.length][board[0].length];

for(int i=0; i<board.length; i++){

for(int j=0; j<board[0].length; j++){

helper(board, res, i, j);

}

}

for(int i=0; i<board.length; i++){

for(int j=0; j<board[0].length; j++){

board[i][j]/=10;

}

}

}

public void helper(int[][] board, int[][] res, int i, int j){

int nOnes=0;

if(i-1>=0){

nOnes+=board[i-1][j]%10;

if(j-1>=0){

nOnes+=board[i-1][j-1]%10;

}

if(j+1<board[0].length){

nOnes+=board[i-1][j+1]%10;

}

}

if(i+1<board.length){

nOnes+=board[i+1][j]%10;

if(j-1>=0){

nOnes+=board[i+1][j-1]%10;

}

if(j+1<board[0].length){

nOnes+=board[i+1][j+1]%10;

}

}

if(j-1>=0){

nOnes+=board[i][j-1]%10;

}

if(j+1<board[0].length){

nOnes+=board[i][j+1]%10;

}

if(board[i][j]==1 &&(nOnes==2||nOnes==3)){

board[i][j]+=10;

}

if(board[i][j]==0 &&(nOnes==3)){

board[i][j]+=10;

}

return;

}

}

Github Link :<https://lnkd.in/ecwtJeaz>

**BONUS: I built this visualizer of Game of Lives, do check it out too.**<https://lnkd.in/eAJ28cK6>