```
import tkinter
from time import sleep
import random

class Window:
    def __init__(self, xdim, ydim, scale):
        self.root = tkinter.Tk()
        self.canvas = tkinter.Canvas(self.root, bg="white", height=ydim*scale,
width=xdim*scale)
        self.scale = scale
        self.canvas.pack()

    def drawPixel(self, x, y, colour):
        s = self.scale
        self.canvas.create_rectangle(x*s, y*s, (x+1)*s, (y+1)*s, fill=colour,
outline=colour)
        self.canvas.pack()

global sizex, sizey, speed
sizex = 250
sizey = 150
speed = 0.01

win = Window(sizex,sizey,6)
pixels = [[0 for i in range(sizex)] for i in range(sizey)]

def updateCanvas(win, pixels):
    win.canvas.delete("all")
    global size
    for y in range(sizey):
        for x in range(sizex):
            if pixels[y][x] == 1:
                win.drawPixel(x,y,"black")
    win.root.update()

def getNeighbourCount(array, x, y):
    global size
    count = 0
    if array[(y-1)%sizey][(x-1)%sizex] == 1:
        count += 1
    if array[(y-1)%sizey][x%sizex] == 1:
        count += 1
    if array[(y-1)%sizey][(x+1)%sizex] == 1:
        count += 1
    if array[y%sizey][(x+1)%sizex] == 1:
        count += 1
    if array[(y+1)%sizey][(x+1)%sizex] == 1:
        count += 1
    if array[(y+1)%sizey][x%sizex] == 1:
        count += 1
    if array[(y+1)%sizey][(x-1)%sizex] == 1:
        count += 1
    if array[y%sizey][(x-1)%sizex] == 1:
        count += 1
    return count

liveConditions = [[3],[2,3]]

pixels[5][1] = 1
```

```
pixels[6][1] = 1
pixels[5][2] = 1
pixels[6][2] = 1

pixels[5][11] = 1
pixels[6][11] = 1
pixels[7][11] = 1
pixels[4][12] = 1
pixels[3][13] = 1
pixels[3][14] = 1
pixels[8][12] = 1
pixels[9][13] = 1
pixels[9][14] = 1
pixels[6][15] = 1
pixels[4][16] = 1
pixels[8][16] = 1
pixels[5][17] = 1
pixels[6][17] = 1
pixels[7][17] = 1
pixels[6][18] = 1

pixels[5][21] = 1
pixels[4][21] = 1
pixels[3][21] = 1
pixels[5][22] = 1
pixels[4][22] = 1
pixels[3][22] = 1
pixels[2][23] = 1
pixels[6][23] = 1
pixels[2][25] = 1
pixels[1][25] = 1
pixels[6][25] = 1
pixels[7][25] = 1

pixels[3][35] = 1
pixels[4][35] = 1
pixels[3][36] = 1
pixels[4][36] = 1


updateCanvas(win, pixels)
sleep(speed)

while True:
    newPixels = [[0 for i in range(sizex)] for i in range(sizey)]
    for y in range(sizey):
        for x in range(sizex):
            if getNeighbourCount(pixels, x, y) in liveConditions[pixels[y][x]]:
                newPixels[y][x] = 1
    pixels = list(newPixels)
    updateCanvas(win, pixels)
    sleep(speed)

```