


```

41     for (Cell cell : cells) { //Check how many cells each cell is touching
42         int index = cells.indexOf(cell); //Get the position of the cell within the ArrayList
43         short amountTouching = 0;
44         if (index + 1 < cells.size() && cells.get(index + 1).alive == true) //Check Uno
45             amountTouching++;
46         if (index - 1 > -1 && cells.get(index - 1).alive == true) //Check Duos
47             amountTouching++;
48         if (index + numColumns < cells.size() && cells.get(index + numColumns).alive == true) //Check Tres
49             amountTouching++;
50         if (index - numColumns > -1 && cells.get(index - numColumns).alive == true) //Check Quadro
51             amountTouching++;
52         if (index + numColumns + 1 < cells.size() && cells.get(index + numColumns + 1).alive == true) //Check Cinco
53             amountTouching++;
54         if (index + numColumns - 1 < cells.size() && cells.get(index + numColumns - 1).alive == true) //Check Seis
55             amountTouching++;
56         if (index - numColumns + 1 > -1 && cells.get(index - numColumns + 1).alive == true) //Check Siete
57             amountTouching++;
58         if (index - numColumns - 1 > -1 && cells.get(index - numColumns - 1).alive == true) //Check Ocho
59             amountTouching++;
60         if (cell.alive) //Check está vivo
61         {
62             if (amountTouching < 2)
63                 newCells.add(new Cell(false));
64             else if (amountTouching == 2 || amountTouching == 3)
65                 newCells.add(new Cell(true));
66             else if (amountTouching > 3)
67                 newCells.add(new Cell(false));
68         }
69         else if (amountTouching == 3)
70             newCells.add(new Cell(true));
71         else newCells.add(new Cell(false));
72     }
73     cells = newCells;
74     UpdateCells();
75 }
76 };
77 //Set the timer to start in 1 second and to go every certain amount of milliseconds.
78 timer.scheduleAtFixedRate(timertask, 1000, interval);
79 }
80 private static void ChangeCell(Point cell, boolean alive)

```

```
81     {
82     if (cell.x < numColumns && cell.y < numRows)
83     {
84         cells.get(numColumns * cell.y + cell.x).alive = alive;
85     }
86 }
87 private static void UpdateCells() { //Prints the board
88     //for (int i = 0; i <= numRows; i++)
89     // System.out.println();
90     for (int y = 0; y < numRows; y++)
91     {
92         for (int x = 0; x < numColumns; x++)
93         {
94             if (cells.get(numColumns * y + x).alive)
95                 System.out.print(Cell.aliveChar+" "); //Prints live character
96             else System.out.print(Cell.deadChar+" "); //If dead, prints dead character
97         }
98         System.out.println();
99     }
100     System.out.println();
101 }
102 }
```

<terminated> Game (2) [Java Application] C:\Program Files\Java\jre1.8.0_71\bin\javaw.exe (Apr 20, 2016, 8:41:57 PM)

```
[=====]
[---[           Welcome to Conway's Game of Life           ]---]
[---[           By: Joseph J. Wunderlich                   ]---]
[---[           April 14-20, 2016                          ]---]
[---[           CS121A                                     Ver. 3.0 ]---]
[=====]
```

Enter how many cells you want to create:

10

Enter an x,y cordinate pair:

1

1

=

Enter an x,y cordinate pair:

2

2

Enter an x,y cordinate pair:

3

3

Enter an x,y cordinate pair:

4

4

Enter an x,y cordinate pair:

5

5

Enter an x,y cordinate pair:

6

6

Enter an x,y cordinate pair:

7

7

Enter an x,y cordinate pair:

8

5

Enter an x,y cordinate pair:

6

7

Enter an x,y cordinate pair:

6

9



x
x
x
x
x x
x x

x
x
x x x
x x
x x

x x
x x
x x
x

x x x
x x x

x
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x x
x
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