**1. Flood Fill:** How many grid cell can be filled with flooded water BFS or DFS any traversal will work. Result will be total visited node's summation.

## 2. Flood Fill in Code: Implementation

From CSES.fi: Counting Rooms

**3. Graph Coloring :** Color the nodes using one of two colors. No 2 adjacent node can have the same color.

It creates a **Bipartite Graph.** So graph coloring will possible if each side of the bipartite graph adjacent nodes aren't connected to each other.

BFS or DFS any traversal will work.

4. Graph Coloring in Code: Implementation

From Cses.fi: Building Teams