

```

class Solution {
    public int numIslands(char[][] grid) {
        if (grid == null || grid.length == 0 || grid[0].length == 0)
            return 0;
        int cnt = 0;
        for (int i = 0; i < grid.length; i++) {
            for (int j = 0; j < grid[0].length; j++) {
                if (grid[i][j] == '1') {
                    cnt++;
                    helper(grid, i, j);
                }
            }
        }
        return cnt;
    }

    public void helper(char[][] grid, int r, int c) {
        if (r < 0 || r >= grid.length || c < 0 || c >= grid[0].length || grid[r][c] == '0')
            return;
        grid[r][c] = '0';
        helper(grid, r, c-1);
        helper(grid, r, c+1);
        helper(grid, r+1, c);
        helper(grid, r-1, c);
    }
}

```