

给定一个由 '1'（陆地）和 '0'（水）组成的二维网格，计算岛屿的数量。一个岛被水包围，并且它是通过水平方向或垂直方向上相邻的陆地连接而成的。你可以假设网格的四个边均被水包围。

```
[["1","1","1","1","0"],["1","1","0","1","0"],["1","1","0","0","0"],["0","0","0","0","0"]]
```

```
11110
```

```
11010
```

```
11000
```

```
00000输出: 1
```

```
11000
```

```
11000
```

```
00100
```

```
00011 输出: 3
```

```
var numIslands = function (grid) {
    if (!grid || grid.length == 0) { return 0; }
    var len = grid.length;
    var size = grid[0].length;
    var island = 0;
    function sink(i, j) {
        if (grid[i][j] == '0') {          // terminator
            return 0;
        }
        grid[i][j] = '0';                // process

        if (i + 1 < len && grid[i + 1][j] == '1') {          // drill down
            sink(i + 1, j);
        }
        if (i - 1 >= 0 && grid[i - 1][j] == '1') {
            sink(i - 1, j);
        }
        if (j + 1 < size && grid[i][j + 1] == '1') {
            sink(i, j + 1);
        }
        if (j - 1 >= 0 && grid[i][j - 1] == '1') {
            sink(i, j - 1);
        }
        return 1;
    }
    for (var i = 0; i < len; i++) {
        for (var r = 0; r < grid[i].length; r++) {
            if (grid[i][r] == '1') {
                island += sink(i, r);
            }
        }
    }
    return island;
};
```