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Island

countIslands (int a[R][C])

d = Disjoint set (n * m)

for i = 0 to i = R

for j = 0 to j = C

if (a[i][j] == 1)

{

if (a[j+1][j] == 1)

d.union(i, j, j, j+1)

if (a[i+1][j+1] == 1)

d.union(i, j, i+1, j+1)

Similarly 8 possible neighbours

}

count = 0, C[R * C] = {0}

for i = 0 to R

for j = 0 to C

if (a[i][j] == 1)

x = d.find(i, j)

if (C[x] == 0)

count++

C[x]++

else C[x]++.

return count.

Rudra