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ADS-lab 20A

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~~batch~~

Island

IBM17C3062

countIslands(int a[R][C]) ①

d = Disjoint Set (n*m);

for i=0 to i=R

for j=0 to j=C

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

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

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

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

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

}

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

after labelling nodes to from the set