

REVANTH.R

IBM18CS082

ISLANDS

2/10/202

count Islands (int arr [x] [y])

d = Disjoint set (n x m)

for i = 0 to i = x

for j = 0 to j = y

```
{
    if (a[i][j] == 1)
        if (a[i][j+1] == 1)
            d.union(i, j, i, j+1)
        if (a[i+1][j] == 1)
            d.union(i, j, i+1, j)
        ...
        d.union(i, j, i, j-1) ...
}
```

count = 0, ~~if (a[i][j] == 1)~~ c[x * y] = {0}

for i = 0 to x

for j = 0 to y

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

x = d.find(i, j)

if (c[x] == 0)

count++ c[x]++

else c[x]++

return count

Revanth