

## ADS - Lab ③ - No. of islands using Disjoint Sets

int countNoOfIslands()

NoOfIslands = 0; visited = False;

for (0 to rows) {

for (0 to cols) {

if (matrix[i][j] == 1) {

if (isNeighbourSame<sup>(i,j)</sup> ~~is True~~ ~~is False~~ ~~visited = false~~)

doUnion()

else {

NoOfIslands++;

}

bool isNeighbourSame (int m, int n).

if (matrix[m][n] == 1 or

matrix[m-1][n-1] == 1 or

matrix[m-1][n+1] == 1 or

matrix[m][n-1] == 1 or

matrix[m][n+1] == 1 or

matrix[m+1][n] == 1 or

matrix[m+1][n-1] == 1 or

matrix[m+1][n+1] == 1) {

return true;

else

return false;

}