CountIslands [Disjoint set).

int Count (vector < vector < int >>a) int n=a·size(); int m=a[o]·size(); Disjoint Union Sets podis = new Disjoint Union Sets (Amm): for (int j=0) j=n ; j++)9 for lit (=0; KCM; K++) of if lalj][k] == 0) continue; if (j+12n de alj+1)[k]==1) dis-> Union (j*m+K, (j+1) * (m)+K), ij (j-18>=0 dd alj-1][k]==1) dis > Union (j * (m) + k, (j-1) * (m)+k); if (k+1 < m dd a[j][k+1] = =1) dis-) Uniam (j* (m)+k, (j)*(m)+k+1); if (K-1>=0 de alj][K-1]==1) dis-Nonion (j* (m) + k, (j) * (m) + k-1). if lj+1 Ln dd K+1 Zm dd a Cj+1](K+1)==V dis-) Union (j*m +k, (j+1)* (m)+K-1); i) (j+12n dd k-1>=0 dd a(j+1](k-1)==1) dis-> Union (j* m+k, (j+1) ** (m)+k-1);

ij (j-1>=0 dd(k+1) 2m dd a(j-1)[k+1]==1)

dis \Rightarrow union (j*m+k), (j-1)*m+k+1).

if (j-1) = 0 dd (j+1) = 0 dd (j-1)(k-1) = 1dis \Rightarrow union (j*m+k), (j-1)*m+k-1

```
Int *c = new Proten*m];
int island = 0.
for (int j=0; j<n; j++){
   for (int k=0; k4m; k++) of
       if (acj][x] ==1) d
          int n= dis > find (j * n + k).
          il ((CX) = =0) &
           island +t;
           c (x) ++;
          c[n] ++;
        island;
```