

Island

```
count Islands (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[i+1][j] == 1)
```

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

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

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

```
    }
```

```
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.
```