(1)

Advanced Data Structures Lab — Rutayit Ritik Rout
Batch - 5 — 1BM18CS151
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Program - 3.

```
int count_island ( ) {
    int islandnum = 0;
    bool ver = false
for ( 0 to column) {
    for ( 0 to row) {
        if ( matrix [i][j] == 1) {
            if ( neighboursame (i, j) == True)
                do Union( )
            else
                islandnum ++
}}}}

bool neighboursame (int m, int n)
    if {
        matrix [m-1][n] == 1
        matrix [m-1][n-1] == 1
        matrix [m-1][n+1] == 1
        matrix [m][n-1] == 1
        matrix [m][n+1] == 1
        matrix [m+1][n] == 1
        matrix [m+1][n-1] == 1
        matrix [m+1][n+1] == 1
            return true
    }
else
        return false.
```

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