

Success [Details >](#)

Runtime: 16 ms, faster than 82.42% of C++ online submissions for Max Area of Island.

Memory Usage: 23.2 MB, less than 66.46% of C++ online submissions for Max Area of Island.

Next challenges:

- Number of Islands
- Island Perimeter
- Largest Submatrix With Rearrangements

Show off your acceptance:

Time Submitted	Status	Runtime	Memory	Language
11/25/2021 01:41	Accepted	16 ms	23.2 MB	cpp

```

1  class Solution {
2      public:
3
4          int n,m;
5  int sum(int i, int j, vector<vector<int>>& grid) {
6      if (i < 0 || j < 0 || i >= n || j >= m || !grid[i][j])
7          return 0;
8      grid[i][j] = 0;
9      return 1 + sum(i-1, j, grid) + sum(i, j-1, grid) +
sum(i+1, j, grid) + sum(i, j+1, grid);
10 }
11
12 int maxAreaOfIsland(vector<vector<int>>& grid) {
13     int ans = 0;
14     n = grid.size();
15     m = grid[0].size();
16     for(int i = 0; i < n; i++) {
17         for(int j = 0; j < m; j++){
18             if (grid[i][j]){
19                 ans = max(ans, sum(i, j, grid));
20             }
21         }
22     }
23     return ans;
24 }
25 };
    
```

Accepted

Runtime: 5 ms

Your input

[[0,0,1,0,0,0,0,1,0,0,0,0,0],[0,0,0,0,0,0,0,1,1,1,0,0,0],
[0,1,1,0,1,0,0,0,0,0,0,0,0],[0,1,0,0,1,1,0,0,1,0,1,0,0],

Output

6

Diff

Expected

6