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## **Area of Component**

Problem	Submissions	Leaderboard	Discussions		
Submitted 2 minu	tes ago • Score: 20.00				Status: Accepted
~	Test Case #0	<b>~</b>	Test Case #1	<b>✓</b> Test C	ase #2
•	Test Case #3	<b>~</b>	Test Case #4	<b>✓</b> Test C	ase #5
•	Test Case #6	<b>~</b>	Test Case #7	<b>✓</b> Test C	ase #8
•	Test Case #9	<b>~</b>	Test Case #10	<b>✓</b> Test Ca	ase #11
•	Test Case #12	<b>~</b>	Test Case #13	✓ Test Ca	ase #14
•	Test Case #15	<b>~</b>	Test Case #16	✓ Test Ca	ase #17
•	Test Case #18	<b>~</b>	Test Case #19	<b>✓</b> Test Ca	ase #20
•	Test Case #21	<b>~</b>	Test Case #22	<b>✓</b> Test Ca	ase #23
•	Test Case #24	<b>~</b>	Test Case #25	✓ Test Ca	ase #26
•	Test Case #27	<b>~</b>	Test Case #28	✓ Test Ca	ase #29
•	Test Case #30	<b>~</b>	Test Case #31		

## **Submitted Code**

```
Open in editor
 Language: C++20
1 #include<bits/stdc++.h>
2 using namespace std;
4 const int N = 1e3+6;
5 int n, m;
6 char ar[N][N];
7 bool visited[N][N];
8 int cnt;
9 vector<pair<int,int>> comp;
10 vector<int> compSize;
11
12 vector<pair<int,int>> path = {{-1,0},{1,0},{0,-1},{0,1}};
13 bool isValid(int ci, int cj)
14 {
       if(ci \geq = 0 and ci<n and cj \geq = 0 and cj<m)
15
16
      return true;
17
      else
18
           return false;
19 }
20
```

```
21 void dfs(int si, int sj)
22 {
23
       visited[si][sj] = true;
24
       comp.push_back({si,sj});
25
       for(auto v : path)
26
27
            int ci = si + v.first;
28
            int cj = sj + v.second;
29
            if(isValid(ci,cj) and !visited[ci][cj] and ar[ci][cj] == '.')
30
31
32
                dfs(ci,cj);
33
34
       }
35
36 }
37
38
39 int main()
40 {
41
42
       cin >> n >>m ;
43
       for(int i = 0;i<n; i++)
44
45
            for(int j = 0; j<m; j++)
46
47
                cin >> ar[i][j];
48
            }
       }
49
50
51
52
53
       for(int i = 0; i<n; i++)
54
55
            for(int j = 0; j<m; j++)</pre>
56
                 if(!visited[i][j] and ar[i][j] == '.')
57
58
                 {
59
60
                     dfs(i,j);
                     // cnt++;
61
                     // for(auto v : comp)
62
63
                             cout<<v.first<<","<<v.second<<" ";</pre>
64
                     //
                     // }
65
                     // cout<<endl;</pre>
66
67
                     compSize.push_back(comp.size());
68
69
                     comp.clear();
70
71
72
                }
73
74
            }
75
76
77
       int mn = INT_MAX;
78
       for(auto el : compSize)
79
80
            // cout<<el<<endl;</pre>
81
            mn = min(mn,el);
82
83
       // cout<<mn<<endl;</pre>
84
       if(mn == INT_MAX) cout<<-1<<endl;</pre>
85
       else cout<<mn<<endl;</pre>
86
```

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