

Submission

ID	DATE	PROBLEM	STATUS	CPU	LANG
	TEST CASES				
8096229	02:00:58	Gregory the Grasshopper	✔ Accepted	0.04 s	C++
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FILENAME	FILESIZE	SHA-1 SUM	
grasshopper.cpp	1085 bytes	30d91027d29eb696feb748b4738baa9c23a4cbb5	download

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grasshopper.cpp

```
1 #include <bits/stdc++.h>
2
3 using namespace std;
4 int n, m, xs, ys, xe, ye;
5 int xx[8] = {-2, -2, -1, 1, 2, 2, 1, -1};
6 int yy[8] = {-1, 1, 2, 2, 1, -1, -2, -2};
7 int qx[10001], qy[10001], ans[101][101];
8 bool check(int x, int y) {
9     if (x < 1 || x > n || y < 1 || y > m || ans[x][y] >= 0) return false;
10    else return true;
11
12    Help    () {
13        int t=0, w=1;
14        for (int i=1; i<=n; i++)
```

```

15     for (int j=1; j<=m; j++)
16         ans[i][j] = -1;
17     qx[t] = xs; qy[t] = ys; ans[xs][ys] = 0;
18     while(t<w) {
19         int cx = qx[t], cy = qy[t];
20         t++;
21         for (int i=0; i<8; i++) {
22             int xt = cx + xx[i], yt = cy + yy[i];
23             if (check(xt, yt)) {
24                 qx[w] = xt; qy[w] = yt; w++;
25                 ans[xt][yt] = ans[cx][cy] + 1;
26                 if(xt == xe && yt == ye) return;
27             }
28         }
29     }
30 }
31 int main() {
32     while(scanf("%d%d%d%d%d%d", &n, &m, &xs, &ys, &xe, &ye) != EOF) {
33         bfs();
34         if (ans[xe][ye] >= 0) printf("%d\n", ans[xe][ye]);
35         else puts("impossible");
36     }
37     return 0;
38 }

```