

# DAA ASSIGNMENT

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<https://www.hackerrank.com/challenges/queens-attack-2/submissions/code/420275655>

The image displays two screenshots of a HackerRank submission for the 'Queens Attack II' problem. The top screenshot shows the initial code and test cases. The bottom screenshot shows the completed code with a loop to check for obstacles.

**Submitted Code (Top Screenshot):**

```
Language: C++
1 #include <iostream>
2 #include <vector>
3 #include <set>
4 using namespace std;
5
6 int queensAttack(int n, int k, int r_q, int c_q, vector<vector<int>>& obstacles) {
7
8     int directions[8][2] = {{1, 0}, {-1, 0}, {0, 1}, {0, -1}, {1, 1}, {1, -1}, {-1, 1}, {-1, -1}};
9
10    set<pair<int, int>> obstacleSet;
11    for (auto& obs : obstacles) obstacleSet.insert({obs[0], obs[1]});
12
13    int attackCount = 0;
14
15    for (auto& dir : directions) {
```

**Test Cases (Top Screenshot):**

- Test case 0: Success
- Test case 1: Success
- Test case 2: Success
- Test case 3: Success

**Submitted Code (Bottom Screenshot):**

```
Language: C++
15 for (auto& dir : directions) {
16     int x = r_q, y = c_q;
17     while (true) {
18         x += dir[0], y += dir[1];
19         if (x < 1 || x > n || y < 1 || y > n || obstacleSet.count({x, y})) break;
20         attackCount++;
21     }
22 }
23
24 return attackCount;
25 }
26
27 int main() {
28     int n, k, r_q, c_q;
29     cin >> n >> k >> r_q >> c_q;
```

**Test Cases (Bottom Screenshot):**

- Test case 0: Success
- Test case 1: Success
- Test case 2: Success

Queen's Attack II | HackerRank

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### Submitted Code

Language: C++ [Open in editor](#)

```
22 }
23
24 return attackCount;
25 }
26
27 int main() {
28     int n, k, r_q, c_q;
29     cin >> n >> k >> r_q >> c_q;
30     vector<vector<int>>> obstacles(k, vector<int>(2));
31     for (int i = 0; i < k; ++i) cin >> obstacles[i][0] >> obstacles[i][1];
32
33     cout << queensAttack(n, k, r_q, c_q, obstacles) << endl;
34     return 0;
35 }
36
```

Test case 0  
Test case 1  
Test case 2

Compiler Message  
Success  
Input (stdin)  
Download

1 4 0

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Search  
ENG IN  
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