 <b>Marwadi</b> University	<b>Marwadi University</b> <b>Faculty of Technology</b> <b>Department of Information and Communication Technology</b>	
<b>Sem : 4</b>	<b>Name : VEDANT BHARAD</b>	
<b>Day : 113</b>	<b>Date : 7/2/2023</b>	<b>Enrollment No: 92100133023</b>


## CP Club 365 Days Challenge

Programming language – C++

### Problem Statement


[https://practice.geeksforgeeks.org/problems/spirally-traversing-a-matrix-1587115621/1?page=1&status\[\]=unsolved&curated\[\]=1&sortBy=submissions](https://practice.geeksforgeeks.org/problems/spirally-traversing-a-matrix-1587115621/1?page=1&status[]=unsolved&curated[]=1&sortBy=submissions)

Git :- [https://github.com/Vedantbharad2603/CP\\_club\\_365\\_Days](https://github.com/Vedantbharad2603/CP_club_365_Days)

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## Your Code:

```
// 0x113Day of 0x365Days challenge
// VEDANT BHARAD
// 7-2-2023
//{ Driver Code Starts
#include <bits/stdc++.h>
using namespace std;
// } Driver Code Ends
class Solution{
public:
//Function to return a list of integers denoting spiral traversal of matrix.
// vector<int>
vector<int> spirallyTraverse(vector<vector<int> > matrix, int r, int c){
// code here
vector<int> toret;
int rs=0,re=r-1,cs=0,ce=c-1;
while (rs<=re && cs<=ce){
for (int i = cs; i <= ce; i++){
toret.push_back(matrix[rs][i]);}
rs=rs+1;
for (int i = rs; i <= re; i++){
toret.push_back(matrix[i][ce]);}
ce-=1;
if(rs<=re){
for (int i = ce; i >= cs; i--){
toret.push_back(matrix[re][i]);}
re-=1;
}
if(cs<=ce){
for (int i = re; i >= rs; i--){
toret.push_back(matrix[i][cs]);}
cs+=1;
}
}
return toret;
}
};
//{ Driver Code Starts.
int main() {
int t;
cin>>t;
while(t--){
int r,c;
cin>>r>>c;
vector<vector<int> > matrix(r);
for(int i=0; i<r; i++){
matrix[i].assign(c, 0);
for( int j=0; j<c; j++){
cin>>matrix[i][j];}
}
Solution ob;
// ob.spirallyTraverse(matrix, r, c);
vector<int> result = ob.spirallyTraverse(matrix, r, c);
```

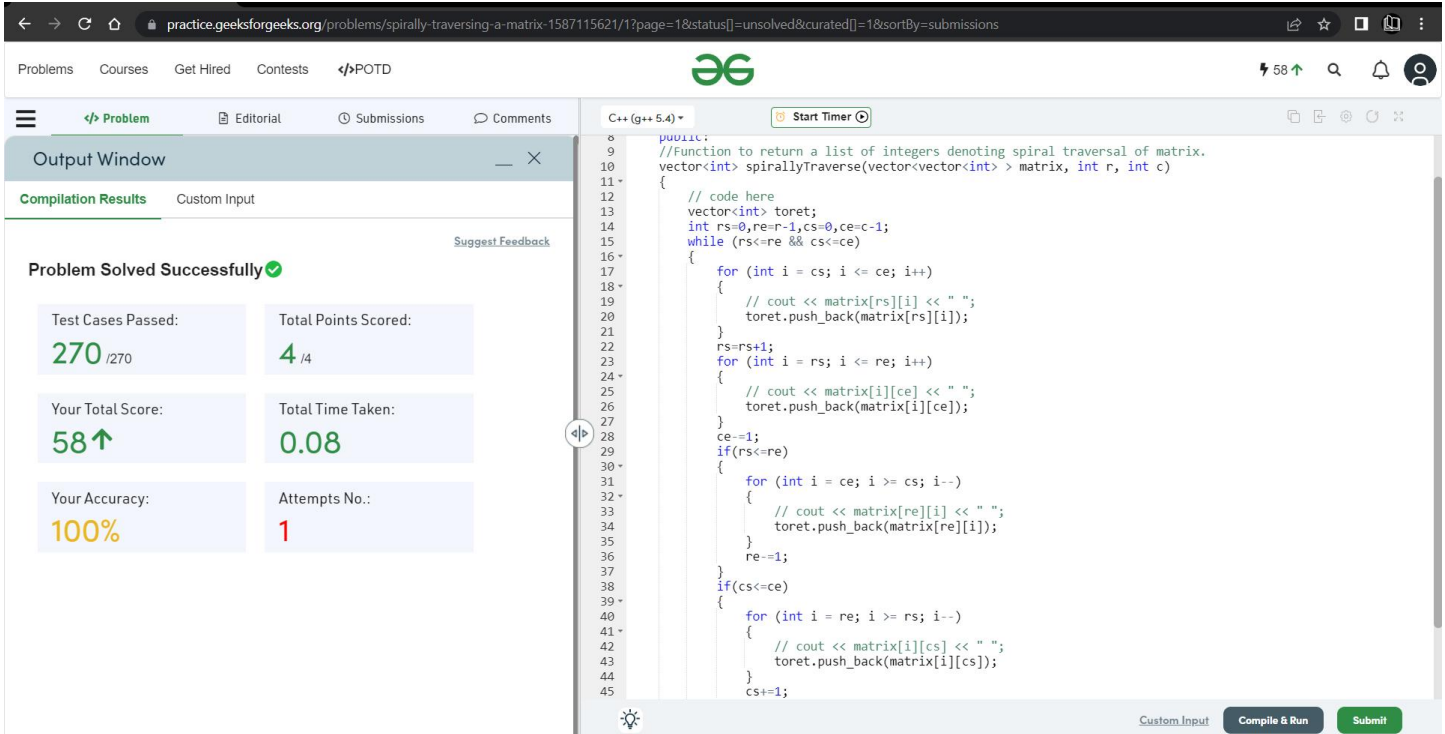
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```

for (int i = 0; i < result.size(); ++i)
    cout<<result[i]<<" ";
cout<<endl;
}
return 0;
}
// } Driver Code Ends

```

## Output (Screen Shot):



The screenshot shows a web browser displaying a coding problem on the 'practice.geeksforgeeks.org' website. The problem is 'spirally-traversing-a-matrix-1587115621/1?status=unsolved&curated[]=1&sortBy=submissions'. The user has successfully solved the problem, as indicated by the 'Problem Solved Successfully' message and the green checkmark.

The 'Compilation Results' section shows the following statistics:

- Test Cases Passed: 270 / 270
- Total Points Scored: 4 / 4
- Your Total Score: 58 ↑
- Total Time Taken: 0.08
- Your Accuracy: 100%
- Attempts No.: 1

The code editor shows the C++ solution for the problem, which uses a spiral traversal algorithm to traverse a matrix and return the result as a vector of integers.

## Understanding about problem:

- In this task there is one matrix and with that I need to traverse a matrix in Spirally and add that data in other vector and at last return that vector.

**Note: If you can't understand the problem, feel free to contact us and we'll help you. Please don't copy and paste from anywhere.**

**ALL THE BEST**

Team CP Club