Elite-S007-Matrix Traversal

Solved Challenges 1/2



Back To Challenges List





Spiral Matrix Printing - Anti Clockwise

ID:11053 **Solved By 496 Users**

The program must accept an integer matrix of size **R*C** as the input. The program must print the layers of the matrix in spiral format (Anti Clockwise) as shown in the Example Input/Output section.

Boundary Condition(s):

2 <= R, C <= 50

Input Format:

The first line contains R and C separated by a space.

The next R lines, each contains C integers separated by a space.

Output Format:

The first line contains R*C values separated by a space.

Example Input/Output 1:

Input:

65

12345

678910

11 12 13 14 15

16 17 18 19 20

21 22 23 24 25

26 27 28 29 30

Output:

1 6 11 16 21 26 27 28 29 30 25 20 15 10 5 4 3 2 7 12 17 22 23 24 19 14 9 8 13 18

Example Input/Output 2:

Input:

44

1234

5678

9 10 11 12

13 14 15 16

1 5 9 13 14 15 16 12 8 4 3 2 6 10 11 7

Example Input/Output 3:

Input:

5 4

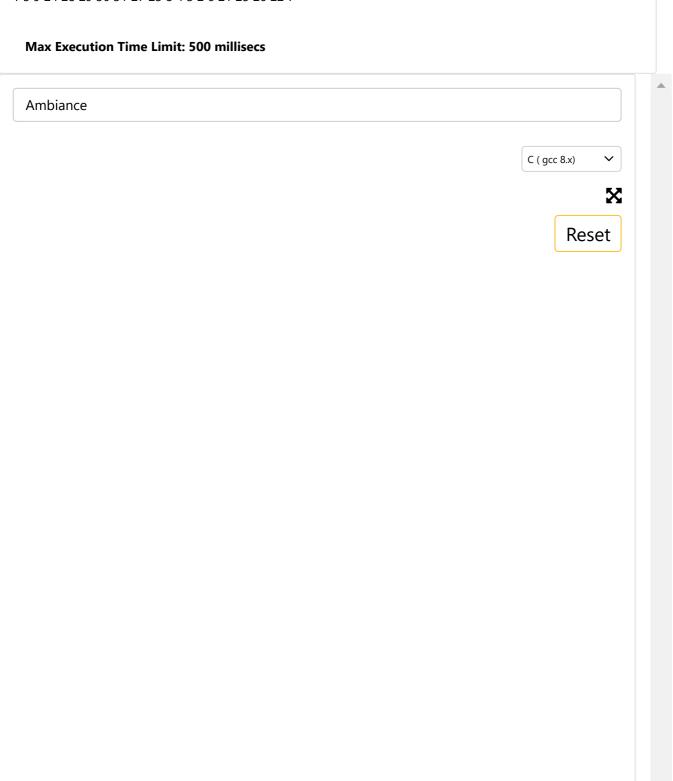
1234

5678

9 21 22 23 24 25 26 27 28 29 30 31

Output:

1 5 9 24 28 29 30 31 27 23 8 4 3 2 6 21 25 26 22 7



```
#include<stdio.h>
 1
 2
   #include<stdlib.h>
 3
 4
   int main()
 5
   {
        int R,C;
 6
 7
        scanf("%d%d",&R,&C);
 8
 9
        int matrix[R][C];
10
11
        for(int row=0;row<R;row++)</pre>
             for(int col=0;col<C;col++)</pre>
12
13
                 scanf("%d",&matrix[row][col]);
14
15
        int startRow = 0;
        int endRow = R-1;
16
17
        int startCol = 0;
18
        int endCol = C-1;
19
        while(startRow<=endRow && startCol<=endCol)</pre>
20
21
        {
22
             //T->B
23
             for(int row=startRow;row<=endRow;row++)</pre>
                 printf("%d ",matrix[row][startCol]);
24
25
             //L->R
26
             for(int col=startCol+1;col<=endCol;col++)</pre>
27
                 printf("%d ",matrix[endRow][col]);
28
29
             if(startCol!=endCol)
30
31
32
             //B->T
33
             for(int row=endRow-1;row>=startRow;row--)
34
                 printf("%d ",matrix[row][endCol]);
35
             }
36
             if(startRow!=endRow)
37
38
             {
39
             //R->L
             for(int col=endCol-1;col>=startCol+1;col--)
40
                 printf("%d ",matrix[startRow][col]);
41
42
43
44
             startRow++;
45
             endRow--;
46
             startCol++;
             endCol--;
47
48
49
        }
50
   }
```

Code did not pass the execution Hello.c: In function 'main': Hello.c:15:5: error: 'startRow' undeclared (first use in this function); did you mean 'strtoq'? startRow = 0; ^~~~~~~ strtoq Hello.c:15:5: note: each undeclared identifier is reported only once for each function it appe Hello.c:16:5: error: 'endRow' undeclared (first use in this function) endRow = R-1;^~~~~ Hello.c:17:5: error: 'startCol' undeclared (first use in this function); did you mean 'strtol'? startCol = 0; ^~~~~~~ strtol Hello.c:18:5: error: 'endCol' undeclared (first use in this function) endCol = C-1; ^~~~~ Save Run Run with a custom test case (Input/Output)