Week-07 Program-04

Due on 2020-03-19, 23:59 IST

Write a C program to print lower triangle of a square matrix.

For example the output of a given matrix

\[
\begin{array}{ccc}
2 & 3 & 4 \\
5 & 6 & 7 \\
4 & 5 & 6 \\
\end{array}
\]

will be

\[
\begin{array}{ccc}
2 & 0 & 0 \\
5 & 6 & 0 \\
4 & 5 & 6 \\
\end{array}
\]

Sample Test Cases

<table>
<thead>
<tr>
<th>Input</th>
<th>Output</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>1</td>
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</tbody>
</table>

Test Case 1
Array and Strings (unit? unit=8&lesson=46)

Lecture 33: String Operations (unit? unit=8&lesson=47)

Lecture 34: 2-D Array Operation (unit? unit=8&lesson=48)

Lecture 35: Introducing Functions (unit? unit=8&lesson=49)

Quiz: Assignment 7 (assessment? name=132)

Week-07 Program-01 (/noc20_cs06/progassignment? name=133)

Week-07 Program-02 (/noc20_cs06/progassignment? name=134)

Week-07 Program-03 (/noc20_cs06/progassignment? name=135)

Week-07 Program-04 (/noc20_cs06/progassignment? name=136)

Week-07 Program-05 (/noc20_cs06/progassignment? name=137)

Feedback For Week 7 (unit? unit=8&lesson=141)

Test Case 2

1 0 0
1 2 0
1 2 3

3 1
2
3
1
2
3

The due date for submitting this assignment has passed. As per our records you have not submitted this assignment.

Sample solutions (Provided by instructor)

```c
#include <stdio.h>
int main()
{
    int matrix[20][20];
    int i,j,r;
    scanf("%d", &r);    //Accepts number of rows or columns
    for(i=0;i<r;i++)    //Accepts the matrix elements from the test case
    {
        for(j=0;j<r; j++)
        {
            scanf("%d",&matrix[i][j]);
        }
    }
    /* Complete the program to get the desired output. Use the printf() stat
    printf("%d ", matrix[i][j]);
*/
    for(i=0; i<r; i++) {
        for(j=0; j<r; j++) {
            if(i>=j)
                printf("%d ", matrix[i][j]);
            else
                printf("%d ", 0);
        }
        printf("n");
    }
    return 0;
}
```