



Time Left: 00:00:00

Sub Matrix Sum

The program must accept an integer **S** and an integer matrix of size **R*C** as the input. Then the program must print the sub matrices which have the sum as S as the output.

Boundary Condition(s):

1 <= R, C <= 20

1 <= Matrix element value <= 1000

Input Format:

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

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

Output Format:

The lines contain the submatrices having the sum as S. Each sub-matrix is separated by a new line containing the string value END.

Example Input/Output 1:

Input:

```
26 4 4
1 2 3 4
20 3 1 2
7 2 6 1
5 4 6 1
```

Output:

```
1 2
20 3
END
20 3 1 2
END
3 1 2
2 6 1
4 6 1
```

Explanation:

Here **S=26**, the submatrices which have the sum as 26 are highlighted below.

1st sub matrix:

```
1 2 3 4
20 3 1 2
7 2 6 1
5 4 6 1
```

2nd sub matrix:

```
1 2 3 4
20 3 1 2
7 2 6 1
5 4 6 1
```

3rd sub matrix:

```
1 2 3 4
20 3 1 2
7 2 6 1
5 4 6 1
```

Example Input/Output 2:

Input:

```
26 4 4
1 2 3 4
2 3 1 2
7 2 6 1
5 4 6 1
```

Output:

```
1 2
2 3
7 2
5 4
END
```

3 1 2
2 6 1
4 6 1

Example Input/Output 3:

Input:

95 3 4
25 11 18 13
22 19 18 16
11 24 10 19

Output:

11 18 13
19 18 16

Max Execution Time Limit: 50 millisecs

Ambiance

Java (12.0)



```

1 import java.util.*;
2 public class Hello {
3
4     public static void main(String[] args) {
5
6         Scanner sc = new Scanner(System.in);
7
8         int toFind = sc.nextInt();
9
10        int r = sc.nextInt();
11        int c = sc.nextInt();
12
13        int arr[][] = new int[r][c];
14
15        for(int i=0;i<r;i++)
16            for(int j=0;j<c;j++)
17            arr[i][j] = sc.nextInt();
18
19        for(int i=0;i<r;i++){
20            for(int j=0;j<c;j++){
21                solveRecursive(arr,i,j,r,c,arr[i][j],i,j,toFind);
22            }
23        }
24
25
26
27    }
28    public static void solveRecursive(int arr[][],int startRow,int startCol,int r,int c,int currSum
29
30        if(currSum==toFind){
31            print(arr,startRow,startCol,rowEnd,colEnd,toFind); // Wrong statement either (row end o
32            return;
33        }
34
35        if(rowEnd<r-1)
36            solveRecursive(arr,startRow,startCol,r,c,currSum+arr[rowEnd+1][colEnd],rowEnd+1,col
37        if(colEnd<c-1)
38            solveRecursive(arr,startRow,startCol,r,c,currSum+arr[rowEnd][colEnd+1],rowEnd,colEnd+1,
39
40        if(rowEnd<r-1 && colEnd<c-1)
41            solveRecursive(arr,startRow,startCol,r,c,currSum+arr[rowEnd+1][colEnd+1],rowEnd+1,colEn
42
43        // solveRecursive(arr,currSum+arr[rowEnd],rowEnd,colEnd,toFind);
44        // solveRecursive(arr,currSum+arr[rowEnd],rowEnd,colEnd,toFind);
45        // solveRecursive(arr,currSum+arr[rowEnd],rowEnd,colEnd,toFind);
46    }
47
48    public static void print(int[][] arr,int startRow,int startCol,int rowEnd,int colEnd,int toFind
49
50
51        for(int i=startRow;i<=rowEnd;i++){
52            for(int j=startCol;j<=colEnd;j++){
53                System.out.print(arr[i][j]+" ");
54            }
55            System.out.println();
56        }
57
58        System.out.println("END");
59
60
61
62    }
63 }

```

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Code did not pass the execution

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Input:

```

26 4 4
1 2 3 4
20 3 1 2
7 2 6 1
5 4 6 1

```

Expected Output:

```
1 2
20 3
END
20 3 1 2
END
3 1 2
2 6 1
4 6 1
```

Your Program Output:

```
1 2
20 3
7 2
END-
1 2 3 4
20 3 1 2
7 2 6 1
END-
20 3 1 2
END-
20 3 1 2
7 2 6 1
5 4 6 1
END-
20 3
7 2
5 4
END-
```

Save

Run