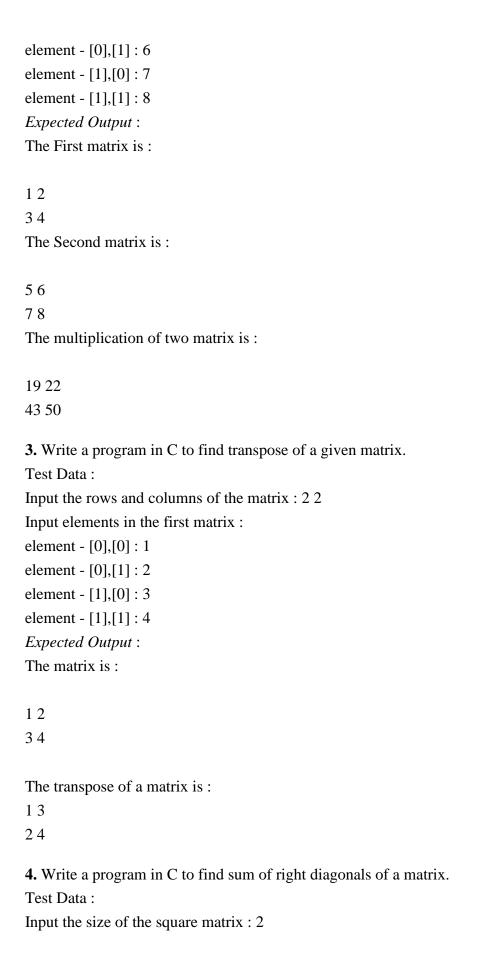
<b>1.</b> Write a program in C for subtraction of two Matrices.
Test Data:
Input the size of the square matrix (less than 5): 2
Input elements in the first matrix:
element - [0],[0] : 5
element - [0],[1]: 6
element - [1],[0]: 7
element - [1],[1]: 8
Input elements in the second matrix:
element - [0],[0] : 1
element - [0],[1]: 2
element - [1],[0]: 3
element - [1],[1]: 4
Expected Output:
The First matrix is:
5 6
7 8
The Second matrix is:
1 2
3 4
The Subtraction of two matrix is:
4 4
4 4
<b>2.</b> Write a program in C for multiplication of two square Matrices.
Test Data:
Input the rows and columns of first matrix: 2 2
Input the rows and columns of second matrix: 2 2
Input elements in the first matrix:
element - [0],[0] : 1
element - [0],[1] : 2
element - [1],[0] : 3
element - [1],[1] : 4
Input elements in the second matrix:
element - [0],[0] : 5



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Input elements in the first matrix:
element - [0],[0]: 1
element - [0],[1]: 2
element - [1],[0]: 3
element - [1],[1]: 4
Expected Output:
The matrix is:
12
3 4
Addition of the right Diagonal elements is :5
Elements in array are:
5. Write a program in C to find the sum of left diagonals of a matrix.
Test Data:
Input the size of the square matrix: 2
Input elements in the first matrix:
element - [0],[0]: 1
element - [0],[1]: 2
element - [1],[0]: 3
element - [1],[1]: 4
Expected Output:
The matrix is:
1 2
3 4
Addition of the left Diagonal elements is :5
6. Write a program in C to find sum of rows an columns of a Matrix.
Test Data:
Input the size of the square matrix: 2
Input elements in the first matrix:
element - [0],[0]: 5
element - [0],[1]: 6
element - [1],[0]: 7
element - [1],[1]: 8
Expected Output:
The First matrix is:
The matrix is:
56
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78
The sum or rows and columns of the matrix is:
5611
7 8 15
12 14
7. Write a program in C to print or display the lower triangular of a given matrix.
Test Data:
Input the size of the square matrix: 3
Input elements in the first matrix:
element - [0],[0]: 1
element - [0],[1]: 2
element - [0],[2]: 3
element - [1],[0]: 4
element - [1],[1]:5
element - [1],[2]: 6
element - [2],[0]: 7
element - [2],[1]: 8
element - [2],[2]:9
Expected Output:
The matrix is:
123
456
789
Setting zero in lower triangular matrix
123
056
009
8. Write a program in C to print or display upper triangular matrix.
Test Data:
Input the size of the square matrix: 3
Input elements in the first matrix:
element - [0],[0]: 1
element - [0],[1]: 2
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element - [0],[2]: 3
element - [1],[0]: 4
element - [1],[1]: 5
element - [1],[2]: 6
element - [2],[0]: 7
element - [2],[1]: 8
element - [2],[2]: 9
Expected Output:
The matrix is:
123
456
789
Setting zero in upper triangular matrix
100
450
789
9. Write a program in C to calculate determinant of a 3 x 3 matrix.
Test Data:
Input elements in the first matrix:
element - [0],[0]: 1
element - [0], [1]: 0
element - [0],[2]: -1
element - [1],[0] : 0
element - [1],[1]:0
element - [1],[2]:1
element - [2],[0]: -1
element - [2],[1]:-1
element - [2],[2]: 0
Expected Output:
The matrix is:
10-1
001
-1 -1 0
```

The Determinant of the matrix is: 1