LAB 6: PRACTICE QUESTIONS ON 2D ARRAYS

Write a program using Java to search for a given key in a two-dimensional array

Input: Number of rows, number of columns, search key, elements of the array.

Output: If the element is found in the array print its index and if not found display the message" Not found".

Sample input 1:

2 3 6 1 2 6 4 5 6

Sample output 1:

0,2
1,2

Sample input 2:

2 2 6 1 2 3 4

Sample output 2:

Not found

Write a program using Java to check whether a matrix is upper triangular.

Input: Number of rows, number of columns, elements of the matrix.

Output: Display whether the matrix is upper triangular or not.

Sample input 1:

3 3 1 2 3 0 4 5 0 0 6

Sample output 2:

Matrix is upper triangular

Sample input 1:

3 3 1 2 3 4 5 6 7 7 9

Sample output 2:

Matrix is not upper triangular

Write a program using Java to display the sum of elements in the rows and the sum of elements in the columns of a matrix.

Input: Number of rows, number of columns, elements of the matrix.

Output: The sum of elements in each row and each column

Sample input:

2
3
1
2
3
4
5
6

Sample Output:

Row 0 6
Row 1 15
Column 0 5
Column 1 7
Coulumn 2 9