

2D ARRAYS SOLUTIONS

Solution 1:

```
public class Solution {
    public static void main(String[] args) {
        int[][] array = { {4, 7, 8}, {8, 8, 7} };

        int countOf7 = 0;
        for(int i=0; i<array.length; i++) {
            for(int j=0; j<array[0].length; j++) {
                if(array[i][j] == 7) {
                    countOf7++;
                }
            }
        }

        System.out.println("count of 7 is : " + countOf7);
    }
}
```

Solution 2:

```
public class Solution {
    public static void main(String[] args) {
        int[][] nums = { {1,4,9},{11,4,3},{2,2,3} };
        int sum = 0;

        //sum of 2nd row elements
        for(int j=0; j<nums[0].length; j++) {
            sum += nums[1][j];
        }

        System.out.println("sum is : " + sum);
    }
}
```

Solution 3:

```
public class Solution {
    public static void main(String[] args) {
        int row = 2, column = 3;
        int[][] matrix = { {2, 3, 7}, {5, 6, 7} };

        // Display original matrix
        printMatrix(matrix);

        // Transpose the matrix
        int[][] transpose = new int[column][row];
        for(int i = 0; i<row; i++) {
            for (int j = 0; j<column; j++) {
                transpose[j][i] = matrix[i][j];
            }
        }

        // print the transposed matrix
        printMatrix(transpose);
    }

    public static void printMatrix(int[][] matrix) {
        System.out.println("The matrix is: ");
        for(int i=0; i<matrix.length; i++) {
            for (int j=0; j<matrix[0].length; j++) {
                System.out.print(matrix[i][j] + "    ");
            }
            System.out.println();
        }
    }
}
```