

Practical 11

Aim : Write a program that generate 6*6 two-dimensional matrix, filled with 0's and 1's , display the matrix, check every raw and column have an odd number's of 1's.

Code :

```
import java.util.*;

class Practical11
{
    public static void main(String args[])
    {
        int[][] a = new int[6][6];

        System.out.println("The Matrix is...");

        for(int i=0; i<a.length;i++)
        {
            for(int j = 0; j<a[i].length;j++){
                a[i][j] = (int)(Math.random()*2);
                System.out.print(a[i][j]+" ");
            }

            System.out.println();
        }

        System.out.println("----->");

        checkRow(a);

        System.out.println("----->");
```

```
        checkColumn(a);

        System.out.println("----->");

    }

    public static void checkRow(int[][] matrix)

    {

        int count;

        for(int i=0; i<matrix.length; i++)
        {
            count=0;
            for(int j=0;j<matrix[i].length; j++)
            {
                if(matrix[i][j]==1)
                    count++;
            }

            if(count%2!=0)
                System.out.println("Row#"+i+" contains odd number of 1's");
        }
    }

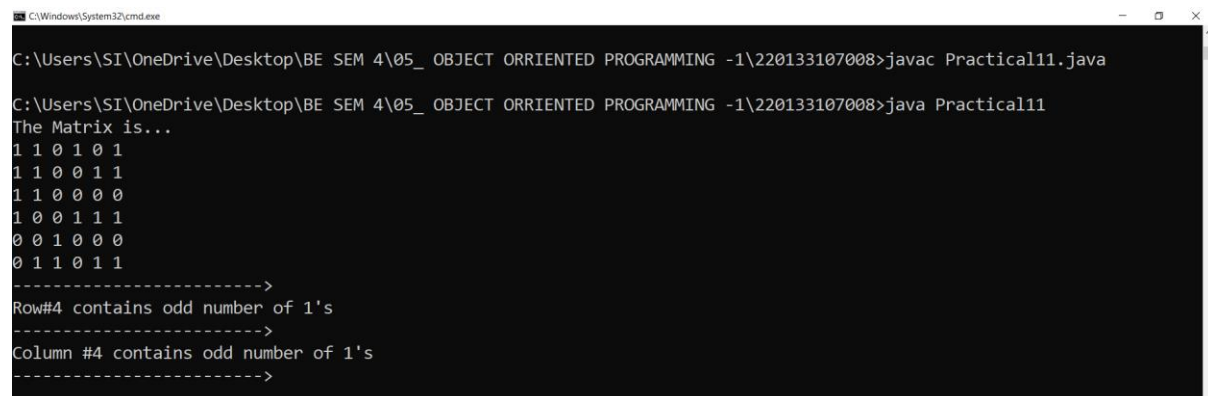
    public static void checkColumn(int[][] matrix)
    {

        int count;

        for(int i = 0;i<matrix.length;i++)
        {
```

```
        count=0;
        for(int j = 0;j<matrix[i].length;j++)
        {
            if(matrix[j][i]==1)
                count++;
        }
        if(count%2!=0)
            System.out.println("Column #"+i+" contains odd number of
1's");
    }
}
```

Output :



```
C:\Windows\System32\cmd.exe
C:\Users\SI\OneDrive\Desktop\BE SEM 4\05_ OBJECT ORRIENTED PROGRAMMING -1\220133107008>javac Practical11.java
C:\Users\SI\OneDrive\Desktop\BE SEM 4\05_ OBJECT ORRIENTED PROGRAMMING -1\220133107008>java Practical11
The Matrix is...
1 1 0 1 0 1
1 1 0 0 1 1
1 1 0 0 0 0
1 0 0 1 1 1
0 0 1 0 0 0
0 1 1 0 1 1
----->
Row#4 contains odd number of 1's
----->
Column #4 contains odd number of 1's
----->
```