

//To print all the prime numbers in a n by n matrix along with their index

Aswin Asok

```
import java.util.Scanner;
public class Matrix_Prime
{
    public static void main(String args[])
    {
        Scanner br=new Scanner(System.in);
        System.out.println("Enter the value for n");
        int n = br.nextInt();
        if(n>1&& n<11) //Checking whether the row and column index are within range
        {
            int a[][] = new int[n][n]; //Creating the 2D Matrix
            System.out.println("Enter the elements for the array");
            for(int i=0; i<n; i++) //Storing values into the array
            {
                for(int j=0; j<n; j++)
                {
                    a[i][j] = br.nextInt();
                }
            }

            System.out.println("ORIGINAL MATRIX"); //Printing the original matrix.
            for(int i=0; i<n; i++)
            {
                for(int j=0; j<n; j++)
                {
                    System.out.print(a[i][j]+" ");
                }
                System.out.println();
            }

            System.out.println("PRIME\tROW INDEX\tCOLOUMN INDEX");
            for(int i=0; i<n; i++) //To find and print prime numbers in the matrix along with row and column
index
            {
                for(int j=0; j<n; j++)
                {
                    boolean check = false;
                    for(int p=2;p<=a[i][j]/2;p++)
                    {
                        if(a[i][j]%p==0)
                        {
```

```

        check = true;
        break;
    }
}
if(!check && a[i][j]>1)
{
    System.out.println(" "+a[i][j]+"\\t "+i+"\\t\\t "+j);
}
}
}
else
    System.out.println("Range out of bounds");

}
}

```

OUTPUT

Enter the value for n

3

Enter the elements for the array

7

8

4

11

12

10

13

5

14

ORIGINAL MATRIX

7 8 4

11 12 10

13 5 14

PRIME ROW INDEX COLOUMN INDEX

7 0 0

11 1 0

13 2 0

5 2 1