

## ASSIGNMENT NO 07

```
package assignment7;

import java.util.*;
import java.io.*;
import java.lang.*;

public class genericdemo
{
    static int count=0;

    static boolean isprime(int num)
    {
        int flag=0;
        for(int i=2;i<num;i++)
        {
            if(num%i==0)
            {
                flag=1;
                break;
            }
        }
        if(flag==0)
        {
            return true;
        }
        return false;
    }

    static<T>void count(String type,T[]element)
    {
        int even=0,odd=0,prime=0,palin=0;
        if(type.equals("prime"))
```

```
{
    for(T value:element)
    {
        if(isprime(Integer.parseInt(value.toString())))
        {
            prime++;
        }
    }
    System.out.println("TOTAL PRIME :"+prime);
}

if(type.equals("even"))
{
    for(T value:element)
    {
        if(Integer.parseInt(value.toString())%2==0)
        {
            even++;
        }
    }
    System.out.println("TOTAL EVEN :"+even);
}

if(type.equals("odd"))
{
    for(T value:element)
    {
        if(Integer.parseInt(value.toString())%2!=0)
        {
            odd++;
        }
    }
    System.out.println("TOTAL ODD:"+odd);
}
```

```

    }

    if(type.equals("palin"))
    {
        for(T value:element)
        {
            StringBuffer rev=new StringBuffer(value.toString());
            if(value.toString().equals(new String(rev.reverse())))
                palin++;
        }
        System.out.println("TOTAL PALINDROME :"+palin);
    }
}

```

```

public static void main(String args[])
{
    Integer iarray[]= {4,7,19,18,44,69};
    count("prime",iarray);
    count("even",iarray);
    count("odd",iarray);
    count("palin",iarray);
    Short sarray[]= {8,11,19,29,51,10};
    count("prime",sarray);
    count("even",sarray);
    count("odd",sarray);
    count("palin",sarray);
}
}

```