```java
import java.util.Scanner;

// ********************************************************************
//   DigitPlay.java
//
//   Finds the number of digits in a positive integer.
// ********************************************************************

public class DigitPlay
{

    public static void main (String[] args)
    {
    Scanner conIn = new Scanner(System.in);

    int num;    //a number

    System.out.println ();
    System.out.print ("Please enter a positive integer: ");

    if (conIn.hasNextInt())
      num = conIn.nextInt();
    else
    {
      System.out.println("Error: you must enter an integer.");
      System.out.println("Terminating program.");
      return;
    }
    System.out.println();

    if (num <= 0)
        System.out.println ( num + " isn't positive -- start over!!");
    else
        {
        // Call numDigits to find the number of digits in the number
        // Print the number returned from numDigits


          System.out.println ("\nThe number " + num + " contains " + + numDigits(num) +
          " digits.");

          System.out.println ();

          System.out.println ("\nThe sum of integers in " + num + " is " + +
          sumDigits(num) + ".");

          System.out.println ();


        if (sumDigits(num) % 7 == 0) {
            System.out.println("The number you entered is ok");
        } else {
            System.out.println("Error: The number you entered is not a valid ID");
        }
        }
    }

```

```
58      // ------------------------------------------------------------
59      //  Recursively counts the digits in a positive integer
60      // ------------------------------------------------------------
61      public static int numDigits(int num)
62      {
63      if (num < 10)
64          return (1);
65      else
66          return (1 + numDigits(num/10));
67      }
68
69      // Recursively finds the sum of the digits in a positive integer.
70      public static int sumDigits(int num)
71      {
72      if (num < 10)
73          return (num);
74      else
75          return (num%10 + sumDigits(num/10));
76      }
77  }
78
79
80
81
```