```java
import java.util.Scanner;
public class LuhnValidate
{
    public static void main(String[] args)
    {
        Scanner input = new Scanner(System.in);
        String num;
        int sum, mod;
        while(input.hasNext())
        {
            num = input.nextLine();
            sum = 0;
            for (int i = 0; i < 8; i++)
            {
                sum += (num.charAt(i)-'0')*(8-i);
            }
            mod = sum % 11;
            if (mod == 0)
                System.out.printf("Number %s is valid\n",num);
            else
                System.out.printf("Number %s is invalid\n",num);
        }
    }
}
```

```java
import java.util.Scanner;
public class LuhnCalculateLast
{
    public static void main(String[] args)
    {
        Scanner input = new Scanner(System.in);
        String num7, num8;
        int sum;
        int mod;
        int last;
        while (input.hasNext())
        {

            num7 = input.nextLine();
            sum = 0;
            for (int i = 0; i < 7; i++)
            {
                sum += (num7.charAt(i)-'0')*(8-i);
            }
            mod = sum % 11;
            if (mod == 0)
                last = mod;
            else
                last = 11 - mod;
            num8 = num7 + last;
            System.out.printf("Number = %s\n", num8);
        }
    }
}
```