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1  /**
2   * Class NumberAnalysis test a number for five conditions and then prints the
3   * results of the tests.
4   *
5   * @author (Yaw Abaaho)
6   * @version (3/3/2019)
7   */
8  public class NumberAnalysis
9  {
10     public boolean isOdd(int n)
11     {
12         return !(n%2==0);
13     }
14
15     public boolean isEven(int n)
16     {
17         if(isOdd(n))
18             return false;
19         else
20             return true;
21     }
22
23     public int countSevens(int n)
24     {
25         int hunds = n%10;
26
27         int tens = (n/10)%10;
28
29         int ones = (n/100)%10;
30
31         int count = 0;
32
33         if (hunds==7)
34             {count = count +1;}
35
36         if(tens==7)
37             {count = count +1;}
38
39         if(ones==7)
40             {count = count +1;}
41
42         return count;
43     }
44
45     public int countOdd(int n)
46     {
47         int hunds = n%10;
48
49         int tens = (n/10)%10;
50
51         int ones = (n/100)%10;
52
53         int count = 0;
54
55         if (hunds%2!=0)
56             {count = count +1;}
57
58         if(tens%2!=0)
59             {count = count +1;}
60
61         if(ones%2!=0)
62             {count = count +1;}
63
64         return count;
65     }
66
67     public int countEven(int n)
68     {
69         int hunds = n%10;

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70
71     int tens = (n/10)%10;
72
73     int ones = (n/100)%10;
74
75     int count = 0;
76
77     if (hunds%2==0)
78     {count = count +1;}
79
80     if(tens%2==0)
81     {count = count +1;}
82
83     if(ones%2==0)
84     {count = count +1;}
85
86     return count;
87 }
88
89 public void report(int n)
90 {
91     System.out.println("It is " + isOdd(n) +
92     " that this number is an odd number. "+
93     "\nIt is " + isEven(n) +
94     " that this number is an even number. "+
95     "\nThe number of seven digits in this number is " + countSevens(n)+"."+
96     "\nThe number of odd digits in this number is "+ countOdd(n)+"."+
97     "\nThe number of even digits in this number is "+ countEven(n)+"." );
98 }
99 }
100
```