```
 1  using System;
 2  using System.Collections.Generic;
 3  using System.Linq;
 4  using System.Text;
 5  using System.Threading.Tasks;
 6
 7  namespace CounterTask
 8  {
 9      public class Clock
10      {
11          private Counter _hours;
12          private Counter _minutes;
13          private Counter _seconds;
14          public Clock()
15          {
16              _hours = new Counter("");
17              _minutes = new Counter("");
18              _seconds = new Counter("");
19          }
20
21          public int Hours
22          {
23              get => _hours.Tick;
24          }
25
26          public int Minutes
27          {
28              get => _minutes.Tick;
29          }
30
31          public int Seconds
32          {
33              get => _seconds.Tick;
34          }
35
36          public void Tick()
37          {
38              if (_seconds.Tick < 59)
39              {
40                  _seconds.Increment();
41              }
42              else if (_minutes.Tick < 59)
43              {
44                  _seconds.Reset();
45                  _minutes.Increment();
46              }
47              else if (_hours.Tick < 23)
48              {
49                  _seconds.Reset();
```

```
50                  _minutes.Reset();
51                  _hours.Increment();
52              }
53              else
54              {
55                  _hours.Reset();
56                  _minutes.Reset();
57                  _seconds.Reset();
58              }
59          }
60          public void Reset()
61          {
62              _hours.Reset();
63              _minutes.Reset();
64              _seconds.Reset();
65          }
66          public string PrintTime()
67          {
68              string currentTime = _hours.Tick.ToString("D2") + ":" +
                  _minutes.Tick.ToString("D2") + ":" + _seconds.Tick.ToString
                  ("D2");
69              Console.WriteLine(currentTime);
70
71              return currentTime;
72          }
73          public void StartClock(int seconds)
74          {
75              for (int i = 0; i < seconds; i++)
76              {
77                  Thread.Sleep(1000);
78                  Tick();
79                  PrintTime();
80              }
81          }
82      }
83  }
84
```