

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

```
50         _hour.Reset();
51         _min.Reset();
52         _sec.Reset();
53     }
54
55     public string ClockTime
56     {
57         get
58         {
59             return $"{_hour.Ticks:D2}:{_min.Ticks:D2}:{_sec.Ticks:D2}";
60         }
61     }
62 }
63
64
```