

SWINBURNE UNIVERSITY OF TECHNOLOGY

COS20007 OBJECT ORIENTED PROGRAMMING

---

## 2.2P - Counter Class

---

PDF generated at 23:33 on Wednesday 15<sup>th</sup> March, 2023

```
1  using Microsoft.VisualBasic;
2  using System;
3
4  namespace CounterTask
5  {
6      class Program
7      {
8
9
10         static void PrintCounters(Counter[] counters)
11         {
12
13             foreach (Counter counter in counters)
14             {
15                 Console.WriteLine("{0} is {1}", counter.Name, counter.Ticks);
16             }
17         }
18     }
19
20
21     static void Main(string[] args)
22     {
23         Counter[] myCounters = new Counter[3];
24
25
26
27         myCounters[0] = new Counter("Counter 1");
28         myCounters[1] = new Counter("Counter 2");
29         myCounters[2] = myCounters[0];
30
31         for (int i = 0; i < 9; i++)
32         {
33             myCounters[0].Increment();
34         }
35         for (int i = 0; i < 14; i++)
36         {
37             myCounters[1].Increment();
38         }
39
40         PrintCounters(myCounters);
41
42         myCounters[2].Reset();
43
44         PrintCounters(myCounters);
45
46
47
48     }
49 }
50
51
52 }
53
```

```
1  using System.Security.Cryptography.X509Certificates;
2
3  namespace CounterTask
4  {
5      public class Counter
6      {
7          private int _count;
8          private string _name;
9          public Counter (string name)
10
11          {
12              _name = name;
13              _count = 0;
14          }
15          public void Increment()
16          {
17              _count++;
18          }
19          public void Reset()
20          {
21              _count = 0;
22          }
23          public string Name
24          {
25              get
26              {
27                  return _name;
28              }
29              set
30              {
31                  _name = value;
32              }
33          }
34          public int Ticks
35          {
36              get
37              {
38                  return (int)_count;
39              }
40          }
41      }
42
43
44  }
45
46
47
48
49
50
51 }
```

