

SWINBURNE UNIVERSITY OF TECHNOLOGY

COS20007 OBJECT ORIENTED PROGRAMMING

2.2P - Counter Class

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```
1  using System;
2
3  namespace CounterTask
4  {
5      public class Program
6      {
7          private static void PrintCounters(Counter[] counters)
8          {
9              foreach (Counter c in counters)
10                 Console.WriteLine("{0} is {1}", c.Name, c.Tick);
11          }
12          public static void Main(string[] args)
13          {
14              Counter[] myCounters = new Counter[3];
15              myCounters[0] = new Counter("Counter 1");
16              myCounters[1] = new Counter("Counter 2");
17              myCounters[2] = myCounters[0];
18
19              for (int i = 0; i <= 9; i++)
20                  myCounters[0].Increment();
21
22              for (int i = 0; i <= 14; i++)
23                  myCounters[1].Increment();
24
25              PrintCounters(myCounters);
26              myCounters[2].Reset();
27
28              Console.ReadLine();
29              PrintCounters(myCounters);
30
31              Console.ReadLine();
32          }
33      }
34  }
```

```
1  using System;
2
3  namespace CounterTask
4  {
5      public class Counter
6      {
7          private int _count;
8          private string _name;
9
10         public Counter(string name)
11         {
12             _count = 0;
13             _name = name;
14         }
15
16         public void Increment()
17         {
18             _count++;
19         }
20
21         public void Reset()
22         {
23             _count = 0;
24         }
25
26         public string Name
27         {
28             get { return _name; }
29             set { _name = value; }
30         }
31
32         public int Tick
33         {
34             get { return _count; }
35         }
36     }
37 }
```

