

SWINBURNE UNIVERSITY OF TECHNOLOGY

COS20007 OBJECT ORIENTED PROGRAMMING

Counter Class

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```
1 public class MainClass
2 {
3     private static void PrintCounters(Counter[] counters)
4     {
5         foreach (Counter counter in counters)
6         {
7             Console.WriteLine("{0}:{1}", counter.Name, counter.Ticks);
8         }
9     }
10    private static void Main(string[] args)
11    {
12        Counter[] myCounters = new Counter[3];
13        myCounters[0] = new Counter("Counter 1");
14        myCounters[1] = new Counter("Counter 2");
15        myCounters[2] = myCounters[0];
16        for (int i = 0; i < 9; i++)
17        {
18            myCounters[0].Increment();
19        }
20        for (int i = 1; i < 14; i++)
21        {
22            myCounters[1].Increment();
23        }
24        MainClass.PrintCounters(myCounters);
25        myCounters[2].Reset();
26        MainClass.PrintCounters(myCounters);
27    }
28 }
29 }
```

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

