

SWINBURNE UNIVERSITY OF TECHNOLOGY

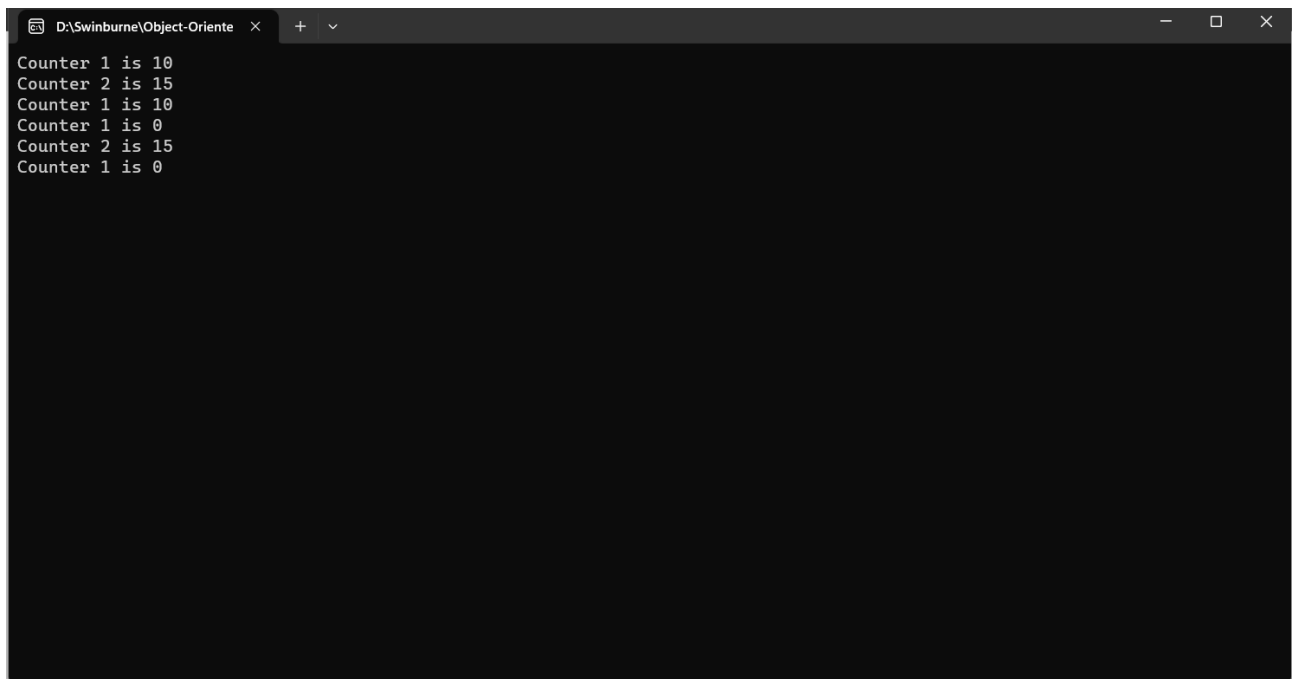
COS20007 OBJECT ORIENTED PROGRAMMING

2.2P - Counter Class

PDF generated at 22:58 on Monday 13th March, 2023

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

```
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 Counter
10     {
11         private int _count;
12         private string _name;
13
14         public Counter(string name)
15         {
16             _name = name;
17             _count = 0;
18         }
19         public void Increment() { _count++; }
20         public void Reset() { _count = 0; }
21         public string Name
22         { get { return _name; } set { _name = value; } }
23         public int Ticks { get { return _count; } }
24     }
25 }
```

A screenshot of a terminal window with a dark background. The window's title bar shows 'D:\Swinburne\Object-Oriented' and standard window controls. The terminal displays six lines of text: 'Counter 1 is 10', 'Counter 2 is 15', 'Counter 1 is 10', 'Counter 1 is 0', 'Counter 2 is 15', and 'Counter 1 is 0'.

```
D:\Swinburne\Object-Oriented x + v
Counter 1 is 10
Counter 2 is 15
Counter 1 is 10
Counter 1 is 0
Counter 2 is 15
Counter 1 is 0
```