

SWINBURNE UNIVERSITY OF TECHNOLOGY

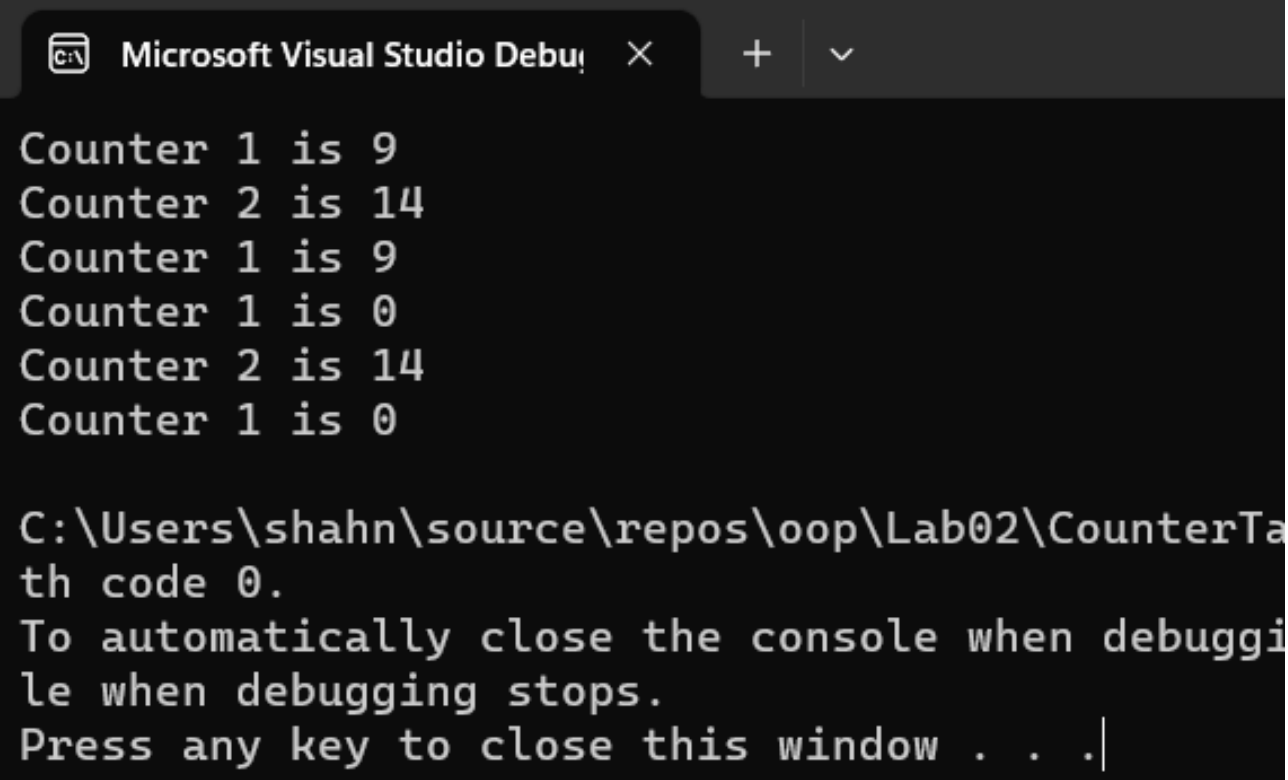
COS20007 OBJECT ORIENTED PROGRAMMING

2.2P - Counter Class

PDF generated at 14:11 on Wednesday 8th March, 2023

```
1  using System;
2
3  namespace CounterTask
4  {
5      class MainClass
6      {
7          private static void PrintCounters(Counter[] counters)
8          {
9              foreach (Counter c in counters)
10             {
11                 Console.WriteLine("{0} is {1}", c.Name, c.Ticks);
12             }
13         }
14         public static void Main(string[] args)
15         {
16             Counter[] myCounters = new Counter[3];
17             int i;
18
19             myCounters[0] = new Counter("Counter 1");
20             myCounters[1] = new Counter("Counter 2");
21             myCounters[2] = myCounters[0];
22
23             for (i = 0; i < 9; i++)
24             {
25                 myCounters[0].Increment();
26             }
27             for (i = 0; i < 14; i++)
28             {
29                 myCounters[1].Increment();
30             }
31
32             PrintCounters(myCounters);
33
34             myCounters[2].Reset();
35
36             PrintCounters(myCounters);
37         }
38     }
39 }
```

```
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 string Name
15         {
16             get
17             {
18                 return _name;
19             }
20             set
21             {
22                 _name = value;
23             }
24         }
25         public int Ticks
26         {
27             get
28             {
29                 return _count;
30             }
31         }
32
33         public Counter(string name)
34         {
35             _name = name;
36             _count = 0;
37         }
38
39         public void Increment()
40         {
41             _count++;
42         }
43
44         public void Reset()
45         {
46             _count = 0;
47         }
48     }
49 }
```



The screenshot shows a Visual Studio Debug Console window with a dark background and white text. The window title bar includes the Visual Studio icon, the text 'Microsoft Visual Studio Debug Console', and standard window controls (close, maximize, and a dropdown menu). The output text is as follows:

```
Counter 1 is 9  
Counter 2 is 14  
Counter 1 is 9  
Counter 1 is 0  
Counter 2 is 14  
Counter 1 is 0  
  
C:\Users\shahn\source\repos\oop\Lab02\CounterTa  
th code 0.  
To automatically close the console when debuggi  
le when debugging stops.  
Press any key to close this window . . .|
```