

SWINBURNE UNIVERSITY OF TECHNOLOGY

COS20007 OBJECT ORIENTED PROGRAMMING

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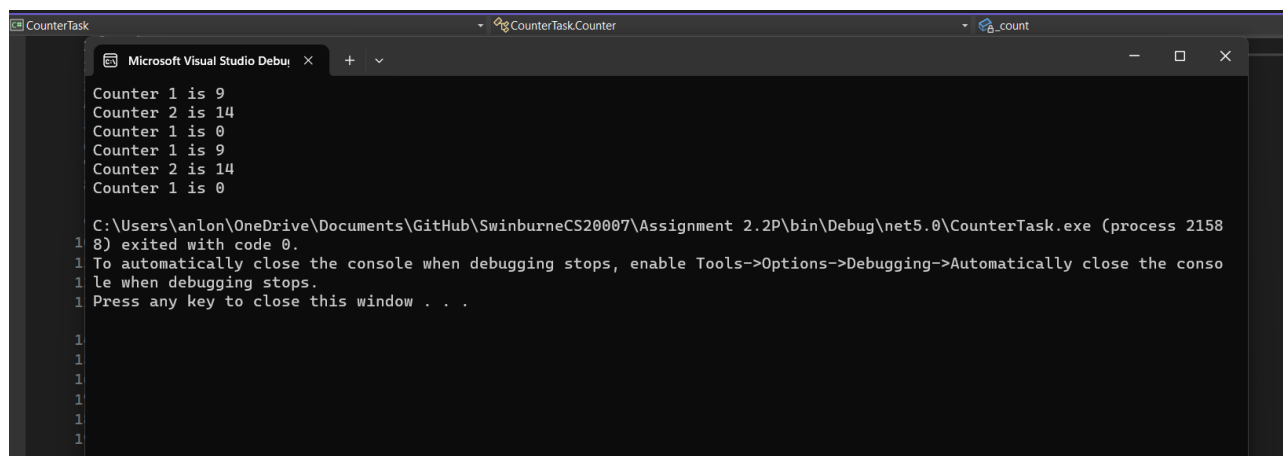
## Counter Class

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PDF generated at 19:28 on Thursday 9<sup>th</sup> November, 2023

```
1  using System;
2
3  namespace CounterTask
4  {
5      internal class Program
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
15         public static void Main(string[] args)
16         {
17             Counter[] myCounters = new Counter[3];
18             int i;
19
20             myCounters[0] = new Counter("Counter 1");
21             myCounters[1] = new Counter("Counter 2");
22             myCounters[2] = new Counter(myCounters[0].Name);
23
24             for (i = 0; i < 9; i++)
25             {
26                 myCounters[0].Increment();
27             }
28
29
30             for (i = 0; i < 14; i++)
31             {
32                 myCounters[1].Increment();
33             }
34
35             PrintCounters(myCounters);
36             myCounters[2].Reset();
37             PrintCounters(myCounters);
38         }
39     }
40 }
```

```
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
20         public void Increment()
21         {
22             _count++;
23         }
24
25         public void Reset()
26         {
27             _count = 0;
28         }
29
30         public string Name
31         {
32             set { _name = value; }
33             get { return _name; }
34         }
35
36         public int Ticks
37         {
38             get { return _count; }
39         }
40     }
41 }
```



```
CounterTask
Microsoft Visual Studio Debug
Counter 1 is 9
Counter 2 is 14
Counter 1 is 0
Counter 1 is 9
Counter 2 is 14
Counter 1 is 0

C:\Users\anlon\OneDrive\Documents\GitHub\SwinburneCS20007\Assignment 2.2P\bin\Debug\net5.0\CounterTask.exe (process 2158)
exited with code 0.
1 To automatically close the console when debugging stops, enable Tools->Options->Debugging->Automatically close the console
1 when debugging stops.
1 Press any key to close this window . . .

1
1
1
1
1
1
1
```