

# Counter.cs

...COS20007\Week\_2\2.2P - Answers\CounterTask\Counter.cs

1

```
1  using System;
2  using System.Collections.Generic;
3  using System.Linq;
4  using System.Security.Cryptography;
5  using System.Text;
6  using System.Threading.Tasks;
7
8  namespace CounterTask
9  {
10     public class Counter
11     {
12         private string _name;
13         public string Name
14         {
15             get
16             {
17                 return _name;
18             }
19             set
20             {
21                 _name = value;
22             }
23         }
24
25         private int _count;
26         public int Tick
27         {
28             get
29             {
30                 return _count;
31             }
32         }
33
34         public Counter(string name)
35         {
36             _name = name;
37             _count = 0;
38         }
39         public int Increment()
40         {
41             return _count++;
42         }
43         public int Reset()
44         {
45             _count = 0;
46         }
47
48     }
49 }
```

# Output Screenshot

```
File Edit View Git Project Build Debug Test Analyze Tools Extensions Window Help Search CounterTask
Counter.cs Program.cs
CounterTask
1 namespace CounterTask
2 {
3     internal class Program
4     {
5         2 references
6         private static void PrintCounters(Counter[] counters)
7         {
8             foreach (Counter c in counters)
9             {
10                 Console.WriteLine("{0} is {1}", c.Name, c.Tick);
11             }
12         }
13
14         0 references
15         static void Main(string[] args)
16         {
17             Counter[] myCounters = new Counter[3];
18             myCounters[0] = new Counter("Counter 1");
19             myCounters[1] = new Counter("Counter 2");
20             myCounters[2] = myCounters[0];
21             for (int i = 1; i <= 9; i++)
22             {
23                 myCounters[0].Increment();
24             }
25             for (int i = 1; i <= 14; i++)
26             {
27                 myCounters[1].Increment();
28             }
29             PrintCounters(myCounters);
30             myCounters[2].Reset();
31             PrintCounters(myCounters);
32         }
33     }
}
Solution Explorer
Search Solution Explorer (Ctrl+Shift+F)
Solution 'CounterTask' (1 of 1 project)
CounterTask
Dependencies
Counter.cs
Program.cs
Microsoft Visual Studio Debug
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\PC\Desktop\COS20007\Week_2\2.2P - Answers\CounterTask\bin\Debug\net8.0\CounterTask.exe (process 26488) exited with code 0.
Press any key to close this window . . .
Output List
Output
Show output from: Build
Ready
Error List
Output
Add to Source Control
Select Repository
2:25 PM
5/23/2024
PRE
```

# Program.cs

...COS20007\Week\_2\2.2P - Answers\CounterTask\Program.cs

1

```
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("{0} is {1}", c.Name, c.Tick);
10            }
11        }
12        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            for (int i = 1; i <= 9; i++)
19            {
20                myCounters[0].Increment();
21            }
22            for (int i = 1; i <= 14; i++)
23            {
24                myCounters[1].Increment();
25            }
26            PrintCounters(myCounters);
27            myCounters[2].Reset();
28            PrintCounters(myCounters);
29        }
30    }
31 }
32 }
```